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The interaction between developmental striving and the course of mental disorder

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THE RELATION BETWEEN DEVELOPMENTAL STAGES AND THE COURSE OF MENTAL DISORDER

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THE INTERACTION BETWEEN DEVELOPMENTAL STRIVING AND THE COURSE OF MENTAL DISORDER

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ABSTRACT

THE INTERACTION BETWEEN DEVELOPMENTAL STRIVING AND THE COURSE OF MENTAL DISORDER. Amy A. Tyson and John S. Strauss. Department of Psychiatry. Yale University, School of Medicine, New Haven, CT.

The diagnosis of a psychotic disorder is not necessarily predictive of outcome. Developmental factors may contribute to improvement or decline in prolonged mental disorder, and the disorder itself may affect the process of development. In this report we hypothesize that the trajectory of normal adult development and the course of prolonged mental disorder are coexisting yet separate processes which interact in definable ways over the span of a person's life.

Two subjects in the Yale Longitudinal Study of Severe Mental Disorder were studied. Data were transcripts of a series of bimonthly audiotaped interviews begun during an inpatient hospitalization and continued over a two-year period. The subjects had different diagnoses, but shared the developmental issue of struggling for competence despite ongoing vulnerability to psychosis. One subject learned to balance his need for developmental challenges with the need to avoid situations that made him symptomatic, enabling him to achieve professional competence in a way that seemed more in keeping with his personal values than did his earlier career trajectory. The second subject initiated a process of negotiation with his auditory hallucinations that appeared to enable him to control these symptoms and help them diminish, but also as a way of integrating his socio-ethnic background and his aspirations for his future.

We conclude that symptoms of mental disorder may hinder developmental

progress or compel a person to compromise in his or her goals, but disorder may also influence development to occur at a different pace or enable a person to alter direction in useful ways. Developmental striving may trigger an exacerbation of symptoms, but pursuing life goals may be important in allowing the person to maintain self-esteem, to progress developmentally despite the disorder, or even to control and contribute to diminution of symptoms.

INTRODUCTION

In this report I propose that the trajectory of normal adult development and the course of prolonged mental disorder are coexisting yet separate processes which interact over the span of a person's life. This detailed examination of two subjects' lives is intended to be a hypothesis-generating study in which I will attempt to describe the ways development and disorder interact over time, to discern developmental factors which contribute to improvement or decline in prolonged mental disorder, and to discern the impact of mental disorder on development over time. I postulate that the personal meaning that people attach to developmental experiences is a major influence in determining the effect of the experience as a stress or support, and that the meaning people attach to their experience of disorder influences the effect of the disorder on development.

I began this project by reviewing data from a longitudinal study of people with severe, chronic mental disorders. I listened to audio-taped interviews conducted over a period of time with two of the subjects from the larger study. I noticed that these people did not seem to be fundamentally different from other people in their desire to have success at work and in relationships. They were involved in the kinds of developmental struggles that all people undergo, such as striving to change and to achieve goals. I found that they did not see themselves primarily as people with a mental disorder; rather, their identity was much more involved with their developmental goals. However, they also

had to contend with lasting episodes or periodic exacerbations of psychotic or depressive mental disorders.

Because of this vulnerability, they struggled to accept themselves both as persons with mental disorder and as persons who were trying to develop normally. These subjects neither gave up developmental striving despite adversity, nor did they persist in trying to live their lives as if they had no vulnerabilities. Instead, they sought a balance which would enable them to continue developing while attempting to avoid or at least to cope with a certain level of symptoms.

The psychopathology that these subjects experience is clearly evident, given their level of symptomatology. The other process however, development, requires a general definition. Although development can be defined in many ways, I use the notion of development to mean a process of intrapsychic change that is ongoing throughout the life cycle. In the process of development, people seem to seek a sense of progression in their lives in order to evolve psychologically. By a related term that I will use frequently below, developmental experiences, I mean the events and circumstances that affect people, and of which people try to make sense in order to find meaning and purpose in their lives. Another related term, developmental striving, refers to the active process by which people set and try to reach goals, such as trying to find satisfying work or forming friendships and intimate relationships. (Such goals may also be termed developmental tasks). In the process of striving for these goals people may discover more about themselves, such as how they function in various settings, what they want out of life, how they cope with failure or disappointment, what they can realistically

achieve, and how their personal characteristics and their goals change over time.

What kinds of interactions occur between development (as evidenced by developmental experiences and developmental striving), and mental disorder? On the one hand, worsening symptoms of mental disorder may hinder developmental progress or compel a person to compromise in his or her goals; at other times, the disorder may influence development to occur at a different pace or enable the person to alter direction in useful ways. On the other hand, developmental striving may trigger an exacerbation of the symptoms. However, continuing to pursue goals may be important in allowing the person to maintain self-esteem or even to progress developmentally despite the disorder.

I have chosen to use work as a useful focus for examining the interactions of development and disorder. Although descriptive psychiatry often views work as a stressor or typically notes only whether or not a person is working, I think this view does not go far enough towards understanding a more complex level of how work and disorder interact. For example, work can be both a stressor and a developmental goal. It may be important to understand how the <u>meaning</u> of work contributes to how a developmental experience may act to exacerbate symptoms or to promote of self-esteem.

In order to begin clarifying the nature of development/disorder interactions using a hypothesis-developing approach, I examine the histories of two subjects. The subjects have in common the problem of striving for goals in the face of vulnerability to a psychotic disorder. The first subject, Leon, I present to illustrate development/disorder

interactions primarily at a descriptive level. I recorded when he made a developmental effort (such as striving to achieve a goal) or when his disorder became worse (such as increased symptoms, decreased functioning, or a hospitalization). When I noticed such an "event" in the course of either development or disorder, I looked for a concomitant event in the course of the other. I hypothesize that with Leon it appears that his disorder enables him to alter his goals and his environment in ways that are actually useful for him, and that this is one way in which disorder affects development. I speculate to some extent on the meaning of these interactions for him, but go into more depth with the next subject, Dan.

I use Dan's history to illustrate once more that development/ disorder interactions can be described, with variations that are particular to the person. In addition, I use his history to investigate the possibility that personal developmental meaning in the symptoms of the disorder itself provides an important link between developmental and pathological processes. Although Dan does not appear to improve functionally, he begins to describe a sense of inner change. I hypothesize that he is undergoing a progressive integration of the jagged fragments of experience into a more unified sense of self, and that this may be a stage which is a necessary precursor to recovery.

METHODS

The two subjects in this study were selected from the Yale Longitudinal Study of Severe Mental Disorder. This is a long-term interview study of people with persistent mental disorders, conducted by John S. Strauss and others since 1980. A large number of subjects with a variety of diagnoses of mental disorders were interviewed regularly, beginning at a time of an inpatient hospitalization. Interviews continued bimonthly for one year and finished with a final interview at the end of the second year following discharge. The data consisted of semi-structured, audio-taped interviews. During the interview, the subjects were asked to describe and discuss the course of their disorder, including the nature of their symptoms, treatment, work, and relationships. They were also asked about the relative importance of psychiatric treatment, environment, significant others, and their own ability to influence the symptoms and the course of the disorder. Other questions regarded their social functioning in the context of work, family, friendships, and treatment. The interviews included structured questions in order to cover a range of issues concerning the disorder and daily life, and open-ended questions to allow the person to discuss whatever issues were most important to him or her.

For this paper, two subjects were chosen from the larger study. These two subjects were chosen to facilitate in-depth investigation of the evidence for interactions between development and disorder, and to enable comparisons to be made between subjects. Both subjects are men in their early thirties, and both have a psychotic disorder; one has the diagnosis of schizophrenia, the other, a diagnosis of schizoaffective disorder (by

DSM III-R criteria). Thus, the two are similar in age, have the same gender, and suffer psychotic disorders. In addition, both have developmental problems around work.

In order to develop empirically based hypotheses, it was necessary to evolve a way to use the data systematically. To this end, I made transcripts from the tapes of every interview so that I would have the person's actual words for reference and quotation. My plan was to work carefully towards hypotheses about which factors may contribute to change in a person's disorder and development, while staying as close as possible to the raw data. That is, rather than drawing conclusions from within any particular established theory, I endeavored to formulate a hypothesis based directly on what the person said during the taped interviews.

As I began to formulate the hypotheses that I outlined in the introduction and to use direct subject quotes to support my argument, I considered carefully everything that was said. I began to formulate a first-level abstraction about what was happening with the person based directly on what he said and understood about himself, and on what was observable in his behavior either in the interview or in the actual events of his life as he described them. Even though the first level abstraction remains close to the person's words, there are still variables which can distort the data: 1) The interactions and interests of the interviewer may direct the flow of the data. I had no control over this process since I was not the interviewer. 2) The process of selecting certain parts from the interviews may ignore data that are relevant to the hypotheses. I was directly involved in this process, and

tried to select the issues which were discussed most repeatedly and seemed most important to the person. In the discussion I will review some issues which may be relevant to the development/disorder interaction but which were not covered in this report.

The second-level abstraction then involved a more theoretical hypothesis about the implications of the first-level abstraction. In order to do this, I generated hypotheses about the interactions between development and disorder that the person did not make for himself. At this level it is clear that more than one interpretation of the data is possible, and certainly in discussions of this material with others, I have been offered various alternatives. Such discussions have helped me to clarify or adjust my own interpretations.

LITERATURE REVIEW

A search through ten major psychiatric journals, Psychological Abstracts, and the Annual Review of Psychology revealed that there is almost no research on the interaction between adult development and the course of mental disorder. There have been many studies on the nature of adult development, conducted with populations assumed to be developmentally "normal." There has also been much research on the course of mental disorder. Since both of these fields are vast, I will present a focused review of the literature. This review is divided into three sections: the first section gives a brief overview of current theories of adult development, with consideration of how adequately each theory can accommodate the possible occurrence of mental disorder. The second section briefly discusses studies on the course of mental disorder, with attention to studies which view the course of mental disorder as subject to many influences. The third section addresses a heterogeneous group of studies which have a conceptual thread in common. Although none of the studies in this last section explicitly addresses development/mental disorder interactions, they all contribute to the postulation of four hypotheses concerning the ways a mental disorder or other life stress may interact with normal development.

A. Theories of Adult Development

The occurrence of mental disorder is but one of myriad factors that may influence development over the course of a person's life. Any adequate theory of development must take into account the effects of many

internal and external experiences including stress, trauma, or illness. Surely normal development does not stop and some other process take over when such events occur. There are many theories of adult development, but I will only focus here on those theories of adult development that can readily accommodate how mental disorder affects development.

One way of thinking about development as it interacts with disorder is to consider at what stage in a person's life the disorder occurs. This perspective makes use of theories of adult development that propose that adulthood is a time of active change occurring in a series of distinct, sequential, age-related stages (21, 23, 33, 42, 78) or that adulthood has stages that are determined by developmental tasks (6, 46). Although age-related stage theories are potentially important for considering development\disorder issues, as currently presented their focus on age\stage sequences rather than person\environment interaction limits their capacity to consider the ongoing interactions between development and disorder or other types of events.

Beyond age\stage theories of adulthood are a number of views of adult development that have not been described previously as a unified group of theories. I will use the word "dialectical" to refer to this heterogeneous group of theories. By "dialectical" I mean that some of these theories attempt to synthesize the apparent contradictions of developmental change and continuity; others try to account for the apparently contradictory effects of stress on development, stating that stress may inhibit development, change its direction, or allow for developmental growth. More so than stage theories, dialectical visions of development are relevant to the current research since these theories

provide a structure better suited for describing the interaction between the course of disorder and ongoing evolutional issues in adults' lives. A number of these theories which I call "dialectical" are described in the following paragraphs.

First I will discuss "life-span" developmental theories, which I consider "dialectical" because among the relevant findings of such studies is that adult development appears to be discontinuous and uneven rather than unfolding in a necessarily sequential manner (21). Life-span theories can accommodate the occurrence of mental disorder in that mental disorder may contribute to the unevenness of ongoing developmental processes. Rather than using chronological age as the organizing concept, life-span developmental studies (3, 4, 5, 17, 21, 24, 37) hold that "the primary focus is on developmental processes that attain their salience in a life-span or life-course context" (3). Three general categories of factors influencing developmental processes are considered by life-span theories: 1)age-related factors (normative biological and environmental factors that correlate with chronological age); 2)historical factors (such as fairly general cultural events, which may have both biological and environmental characteristics); and 3)"non-normative" factors (biologically and environmentally significant events that do not occur for everyone) (4). Since life-span developmental theory proposes that "non-normative" or "significant life events" may organize developmental change (39), by extrapolation mental disorder could be considered by this theory as a significant event that acts as a fulcrum for developmental change.

Life-span theories, although interesting and complex, are still

constrained by the notions that adult development is linear, proceeds according to an inevitable developmental trajectory, and can be measured by specific traits. A contrasting view is that adulthood is organized by the individual's own attempts to maintain continuity and that psychological remodelling continues throughout life (17, 47, 53, 65, 70). Although psychological issues and life events can still be viewed as organizing themes in peoples' lives, "there are changes in the inner life that do not always appear in awareness or lend themselves to direct expression...Some of us regard this area as one in which true developmental or age-related change are to be sought" (17, p.891). In other words, there may be a way of conceptualizing development that involves internal psychological structures and processes not necessarily measurable by external factors.

Several novel methodological approaches have been employed in investigating development from the "dialectical" perspective, meaning that these studies attempt to investigate complex contradictions in people's lives. Investigators have used interviews, autobiographical accounts, single case reports, and small sample reports in order to study aspects of development that are not easily measured by statistically-based studies of large cohorts (17, 47, 65, 68). The more intensive personal methods are one way of bridging the gap between the true complexity of people's lives and the limitations of research formats confined to numerically analyzable data. The method of obtaining detailed life-histories (i.e. listening to how people interpret their own experiences) may come closer than other methods to conveying development as a process that occurs in a social context (15, 16, 25).

By combining the idea of non-normative or significant life events with the method of detailed life histories, the complex dynamic of internal change may be closely examined. Using this method, Settlage et al see development as an internal response to stimuli that disturb adaptive functioning (65). They define such stimuli broadly to include biological maturation, environmental demand, loss (which can include loss of a bodily function or self-esteem), or even self-initiated desire to develop. Development may actually involve an anxiety-provoking process of tension and conflict before integration and growth can occur. By extrapolation from Settlage's view, mental disorder could be seen potentially, among other things, as a stimulus to developmental growth.

B.The Course of Mental Disorder

I now turn to theories about the course of mental disorder in order to see how developmental issues are considered. In fact, it is difficult to find studies examining the interaction between the course of mental disorder and the process of adult development. Instead, mental disorders have been described as having their own course -- the "natural history" view of mental disorder as a disease which unfolds inevitably in its characteristic way. In this view, the diagnosis of a certain disorder implies a particular course and outcome that are not significantly affected by outside variables (75). It is no longer certain, however, that the diagnosis of a psychotic disorder is predictive of outcome. For example, a number of studies have shown that the diagnosis of schizophrenia based on symptom picture does not predict a uniformly gloomy outcome (72). Many people with this diagnosis improve over the

course of their lives, and the course and outcome of their disorders reveal a wide range of expression. (7, 8, 35, 38, 79).

Some studies have looked at factors other than diagnosis that influence outcome (7, 13, 28, 71, 72, 73, 74). Only a few, however, have tried to describe the course of disorder in a developmental framework by viewing the disorder as occurring in a person who changes over time in an environmental context (70). The course of mental disorder has been described as non-linear and phasic and as influenced by an active role on the part of the patient. Events or situations can influence course of disorder in various ways depending on the meaning of the event to the person (54, 66, 70). Systematic description of course over time may reveal much more about the relationships between person and environment than can detailed description of just one episode of disorder (54). Such views of disorder are more complex than a linear "diagnosis equals prognosis" view, and hence are more closely connected to "dialectical" views of development: the non-linearity of course of disorder may be related to the non-linearity of development; the active role of the patient may be an aspect of normal developmental striving; and the meaning of events may signify a complex historical interaction of the events with the individual over time.

C.Interactions Between Development and Disorder

Before discussing the topic of ongoing interactions between adult development and mental disorder, it is important to address the history of theories of interruptions in normal child development as etiology for mental disorder. Inquiry into adult psychopathology led to the view that

the origin of psychopathology was rooted in childhood. Child development was seen as a process of biological maturation with corresponding intrapsychic stages of psychosexual, cognitive, and emotional development (26, 51, 43). Theories of child development have been based on reconstructions of early life from adult analyses, and more recently on direct observations of children (67, 43, 1, 22). An important impetus for studying normal child development came from the theory that when a child's development goes awry, whether from genetic or environmental insults, psychopathology results. Various aspects of early developmental problems have been linked to subsequent neuroses, conflicts, and other more severe disturbances; more recent work has raised the question concerning the presence of health even given developmental discontinuities (76). These etiologic theories provide interesting hypotheses about how problems in normal development may cause disorder. The question of how the same developmental problems often do not cause disorder is also fascinating. However, these theories say little about the ongoing interactions between adult developmental processes and course of disorder.

Four Hypotheses

Since development and mental disorder interactions are not explicitly addressed in any literature that came to my attention in my review, I will develop four main hypotheses that can be postulated from studies which are relevant to considering how development and disorder interact. I use disorder, adversity, stress, or pathology as the life issues which interact with development in these hypotheses, since these are the issues

addressed in the studies. The four hypotheses are:

Hypothesis #1: Development is ongoing despite stress or pathology.

Hypothesis #2: Developmental progression can occur in response to stress or pathology.

Hypothesis #3: Stress or pathology may harm or hinder developmental progress.

Hypothesis #4: Development may alter stress or pathology.

Hypothesis #1: Development is ongoing despite stress or pathology.

a) Coping, Resilience, and Competence

The view that development is ongoing despite stress or pathology might be considered the ability to make use of "coping", "resilience", or "competence". The relevance of these ideas to my central topic is that these concepts address the question of why and how people confronted with enormous difficulties continue striving. It has been noted that the vast majority of people exposed to stressful life events exhibit resilience rather than developing emotional disorders (34). Even in the face of existing mental disorder, the use of coping strategies, being resilient, or achieving competence might be seen as making use of developmental strengths.

One way of understanding developmental strength is to investigate coping strategies. Coping implies the active role of the individual in dealing with stressors. It is the notion of the individual's active role that relates the concept of coping to development, since coping could be conceptualized as an age-related developmental ability, or as a mechanism for developing strengths in the face of challenges. Although there are numerous studies of coping with physical illness or surgery (2, 14, 19,

32, 36, 45, 56), and other studies address coping as a means of adjustment to life crises such as losses or accidents (9, 26), few consider the issue of coping with mental disorder (11, 18, 44, 46, 77). Coping with mental disorder may be more complex than coping with an external event or even physical illness, because it is experienced internally, and the disorder itself may alter the perceptual, cognitive, and affective abilities that underlie the ability to cope.

The concept of resilience is another way of viewing ongoing developmental strengths in the face of stress. There are a number of studies of children who develop competence despite exposure to severe stressors. They are called "stress-resistant" or "resilient" children. (28, 29, 30, 59, 60). Such resilience is not explainable merely by positing individual or genetic differences. Rather, there is a complex relationship between individual differences and the environment, since individual temperament may reflect both genetic endowment and experience (52). Hence, the individual characteristics a person brings to the environment may help shape it (61), and the effect of environmental stresses on different people may be determined by prior experiences which color the meaning of the current experience (59). Relating this idea to mental disorder, a person might become symptomatic for reasons more complex than simply a stress uncovering vulnerability to disorder, and there is more to resistance to disorder than simply individual genetic differences.

The concepts of coping, resilience, and competence in the face of stress are relevant to the interaction of development and mental disorder if mental disorder is viewed as one kind of stress with which people must

cope. Thus they are relevant to the question of why one person with a mental disorder shows more developmental strengths than another (copes or is more resilient), and also to the question of why a people with mental disorders handle their state differently at different times (since the concepts of coping and resilience take into account many factors: the person, the stress, the environment, all of which may change and interact in different ways).

b)The process of recovery as an aspect of ongoing development

Another way of thinking about the first hypothesis, that development is ongoing despite adversity, is to consider the process of recovery from mental disorder. Sparrow points out that the common view of recovery from psychosis is that "recovery constitutes a restoration of premorbid capacities"; however, the process of recovery might instead be viewed as "a developmental process through which new capacities emerge" (66). The "dialectical" views of normal adult development include the notion of working through stressful experiences in order to form new "functions and structures" which "constitute additions to or advances in the self-regulatory and adaptive capacities" (65). The developmental process may accomplish: "a)formation of a new function; b)elaboration or refinement of an existing function; c)further integration of an existing function toward greater autonomy and structural stability; d)reorganization of psychic structure to a higher level of function" (65, p.357). Even the linear models of development have described the emergence over time of new capacities, which include a broader range of ego defenses (78).

These views of new capacities emerging in the process of normal

development can be related to the attempt to understand recovery from mental disorder as a developmental process. One way the process of recovery from psychosis has been seen as involving formation of new structures is the view that during recovery new defensive capacities are formed which are more adaptive than previous defenses (44, 58, 62, 64, 78). Two categories of defenses which may emerge in the recovery process include "sealing over" (viewing the psychosis as an interruption in life; related to the concept of denial) and "integration" (the ability to understand the impact of the illness, to accept responsibility for it, and to achieve awareness of the continuity between the non-psychotic self and the psychotic experience by seeing the psychosis as a source of information about the self and trying to understand it) (44).

Despite evidence for emergence of new, adaptive defenses in the process of recovery from psychosis, such findings do not encompass the range of changes a person might undergo during the course of a disorder, including those processes which occur even during a time which does not look like recovery. A developmental perspective may provide the necessary breadth to account for the importance of changes in attitudes and feelings, as well as changes in interactions with the environment. In other words, recovery and the concomitant emergence of adaptive defenses may be only one aspect of a larger developmental process. One view is that development does not necessarily mean recovery: "Development, obviously, is not the same as growth and can include progression, regression, new contributions, remodeling, and, in some ways, decline" (53, p.552). I would add that although development does not necessarily mean recovery from mental disorder, any apparent

stagnation or decline in functioning is not in itself a developmental process, but may be instrumental phases in stimulating development; this point is related to hypothesis #2, which is discussed next.

Hypothesis #2:
Developmental progression can occur in response to stress or pathology.

The second of the four hypotheses is that life stresses can be development-stimulating events. This idea has already been mentioned in the context of the "dialectical" views of development. For example, stressful events can have a "steeling" effect (42), or can be organizing principles for developmental change (39). In this view, stressful events (ranging from marriage or parenthood to illness or loss of function) produce tensions and conflicts that act as developmental challenges. Resolution leads to formation of adaptive structures, and ultimately to a change in the individual's sense of identity (65). This hypothesis has also been proposed as the mechanism by which resilience is built; the mastering of a stress situation leads to self-confidence which leads to further resilience (53).

A slightly different perspective on this hypothesis is the view that even the occurrence of disease can have a positive impact on developmental progression. An example of this is the proposal that children's common minor illnesses can have a beneficial effect on their behavioral development (47). Illness provides opportunities for children to increase their knowledge of self, of others, their social behavior, empathy and the sick role; children and their parents can make use of illness to discuss internal states, what causes such states to change,

and what the difference is between feeling physically and emotionally bad. Hence even negative experiences can be developmentally helpful.

Hypothesis #3:
Stress or pathology harms or hinders developmental progress.

The hypothesis that the occurrence of stress or pathology interferes with development may be the most commonly held of the hypotheses summarized here. This view is consistent with those theories which hold that development is a sequential progression of necessary stages in which particular developmental tasks must be accomplished, and a major stress would simply disrupt the process. An example of this hypothesis are the reports that the different kinds of conflicts expressed by men and women with schizophrenia may have to do with the stage of life in which the disorder first developed (63). Schizophrenia develops five to ten years earlier in men than in women, at a stage in life when a man may be in the process of moving away from parents, and achievement of autonomy still lies ahead. Such tasks remain uncompleted when the disorder interferes, and the man may continue to express and struggle with these issues. If a woman is older when she first becomes schizophrenic, her concerns at the time may center around sexuality and love, and such issues may continue to preoccupy her. In this view of development and disorder, disorder is seen as negatively affecting development by arresting developmental concerns.

The reports of negative impact of chronic physical illness on development are additional examples of this hypothesis. If the individual life cycle is viewed as unfolding according to a particular plan, then the occurrence of a chronic illness will disrupt the system

and development will be halted at that point (57). But the literature also suggests a more complex interaction. Because of its chronicity, the disease itself may also have phases (crisis, chronic, terminal), each of which may have its own psychosocial tasks which demand different coping strategies. Hence not only does disease have a negative impact on developmental unfolding, but developmental capabilities affect how well each phase of the disease is coped with. This last twist is perhaps an aspect of hypothesis #4, which proposes in part that development can affect disease; in the above example, the physical disease process is not altered, but the impact of the disease on the individual may be ameliorated if each phase of disease is coped with adequately.

Hypotheses #4: Development affects stress or pathology.

This hypothesis is actually more complicated than it appears. It is really a hypothesis about the complex, reverberating interactions between development and disorder. It may incorporate elements from the other three hypotheses, with the addition of actual feedback effect on the disorder or stress itself.

This hypothesis initially appears puzzling: what power do developmental processes have actually to alter the course of a disease process, or change an external stress? When the disease process is mental disorder, which as discussed above does not have an inevitable course, it seems reasonable to consider that the active developmental striving of an individual could alter the course and outcome of a mental disorder (10, 11, 18, 34, 55, 69, 77).

An interesting glimpse of the possibility of individuals actively

influencing the course of their disorder is revealed when Vaillant (77) asked men recovered from alcoholism to what they attributed the change; many of them said they had to first "hit bottom" or use "will power." However, in spite of his interest in development, Vaillant systematically discounted the developmental aspects of the person in thinking about how people recover from alcoholism. He considered incidents and environmental occurrences (such as using particular support organizations or forming social relationships) as measurable data, but discounted the possibility that there are internal and possibly unconscious steps that people take that influence whether they have the initial ability to reach for such supports. It may be important to learn about the process people undergo, such as first "hitting bottom" as a result of the disorder (hypothesis #3: disorder harms development), then realizing the necessity of making choices which would assist them in changing and using "will power" to begin developing further (hypotheses #1: development emerges despite disorder, and hypothesis #2: developmental progression can occur in response to stress or pathology). Ultimately, all of these elements converge to create the outcome of recovery (hypothesis #4: development may alter the disorder).

Perhaps the meaning of "will power" could be investigated further as an example of developmental striving by which a person might actively influence the course of his or her disorder. Strauss et al suggest that "it might be possible that goal-setting, creative problem-solving, innovative collaboration, and the construction of meaning can play important parts in recovery. Perhaps the even more ephemeral notions of courage, hope, and motivation fuel such processes." (69, p. 162). Active

developmental processes were reflected in one study which found that patients actively controlled symptoms by self-instruction, reduced involvement in activity, and increased involvement in activity (11). Another study found that patients have a broad range of interpretations of their psychotic disorders, and that the type of insight a patient has may influence the course of the disorder (34). Some patients may use the experience of reaching a point of extreme decompensation to undergo a process of internal reorganization. This process then enables them to begin overcoming their symptoms and imrove in functioning (55). Hence there are studies which indicate that an active role on the part of the person with mental disorder can influence the course of disorder. Some of the factors involved in the person's active role may indeed be unconscious, but the method of asking the person what he or she thinks leads to fluctuations in the disorder is one way of uncovering the complexity of factors which influence the disorder. The person's initiative or "will" in influencing recovery from psychosis may actually be an aspect of normal developmental striving which all people express by whatever form of forward momentum they choose to have in their lives. People with a mental disorder may express developmental striving by influencing the course of their disorder in attempts to improve and to develop.

One final example of this complex process of development and disorder interaction is to consider the effect of a severe trauma on development. In the case of a woman who experienced ongoing sexual abuse as a child and was hampered in her subsequent development (hypothesis #3: the trauma hinders development), developmental shifts during adulthood are noted

(such as choosing a career, and later renegotiating the roles in her marriage) as times when she began actively to take more control over her life (hypothesis #1: development emerges despite the trauma) (48). Coping and adaptation following victimization are viewed as part of an ongoing developmental process, manifested as internal cognitive and emotional processes which enabled the woman to create and make use of external supports. A crucial factor in enabling the woman to develop was the ability, in retrospect, to alter the meaning, and hence the power, the abuse had in her life. In this way, her developmental strength altered the destructive power the past events once held (hypothesis #4: development affects the trauma, after a lengthy process of trauma altering development, and developmental strength slowly emerging).

LEON L.: DEVELOPMENTAL STRIVING

I turn now to the person whose evolution first started me thinking about developmental striving, and whose course I examine to see the interaction between development and disorder. Leon is a thirty-five year old, divorced Caucasian man with a diagnosis of schizoaffective disorder; he has had fluctuating symptoms of this disorder for about five years. He has pursued a career in science, first as a PhD graduate student for ten years, and, at the time he entered the study, as a post doctoral fellow. The series of semi-structured interviews with Leon began at the time of a second hospitalization. The interviews continued on a bimonthly basis for one year, and concluded with a final interview at the end of two years. Information on his course covers the two years during which he was interviewed for the study, and also extends back retrospectively over five years, to the period before his first hospitalization.

I will introduce a summary of my hypotheses about Leon before presenting the data in more detail. The first hypothesis is that a pattern over time of interactions between developmental striving and symptoms of disorder is discernible when Leon's history is examined. The pattern I propose for Leon is that hard work is associated with psychosis, loss of work or support is associated with depression, and that these situations are points at which the interaction between development and disorder can be illuminated. However, despite the propensity to mental disorder at these times, Leon does not <u>always</u> seem to be vulnerable to debilitating symptoms; sometimes during these

situations the symptoms do not occur, or do so only mildly. Thus I propose that beyond these more general situations, particular environmental stresses are also necessary for Leon to experience disorder in its most severe form. Additionally, the meaning that Leon associates with given combinations of situations and environmental stresses seems to influence whether the disorder is expressed as psychosis or depression. The second hypothesis is that Leon has developed. For this hypothesis there is both the external evidence of improved functioning (he completes developmental tasks) and evidence of internal change (he integrates insight about his disorder with his developmental goals, enabling him to make choices which take both his disorder and his goals into account).

In my study of Leon, I explore eight episodes that are important in his history because each illustrates the occurrence of a developmental process and/or a period of disorder. To summarize briefly the sequence of episodes: The first episode occurred when Leon had his first psychotic break at the age of thirty. He was hospitalized at that time for three months and showed improvement. Following discharge, he underwent a six week period of moderate depression, which I call the second episode. He was fairly stable over the next five years, with only occasional symptoms of "crazy thoughts". At age thirty-five he entered a period of clearly worsening psychotic symptoms (the third episode) that did not immediately reach a point requiring hospitalization. Instead, over the ensuing four months he became increasingly depressed, until he felt suicidal and was hospitalized (the fourth episode). At this time he entered the interview study. After discharge, Leon felt much improved until he had a period of mild depression (the fifth episode) that did not

worsen. Some weeks later he experienced fairly severe psychotic symptoms (the sixth episode) that lasted a week. The symptoms then persisted in milder form for another month and resolved. Towards the end of the bimonthly follow-up period, one year after his second hospitalization, he underwent many stressful changes at once but did not become symptomatic (the seventh episode). When followed up one year later, he was coping extremely well with a responsible and challenging job, and had not had any major increase in symptoms (the eighth episode).

(See Table, page 52)

I shall examine Leon's pattern of symptom status in relation to developmental situations and stressful events by first describing the life situations surrounding each episode. I will then discuss the developmental pattern emerging in each episode and speculate on its possible meaning to Leon.

Episodes One and Two

Leon's first episode of psychosis occurred at age thirty, five years prior to the admission during which he entered this study. During the months before the episode, he was working intensively up to eighteen hours a day on the proposal for his PhD thesis, isolating himself from other people, and entering what he called a state of "elevation" in order to write. He was also drinking heavily. He developed delirium tremens and several types of delusions: delusions of reference, delusions of talking with animals by mind transference, and delusions of insect invasions. At that point he was hospitalized for three months. It is unclear whether he began to have psychotic symptoms which then prompted

him to stop drinking (and hence the withdrawal syndrome), or whether he stopped drinking suddenly (which then precipitated psychotic symptoms). Although the order of events of this first psychotic episode is not entirely clear, we do find out that his subsequent psychotic episodes have not been alcohol related, since he quit drinking completely after that first breakdown.

The interaction between development and disorder may be reflected for Leon in the interaction between striving to work and the emergence of psychotic symptoms. Leon's style of working extremely hard appears to be associated with his psychosis. Leon believes that he caused both the first and the subsequent breakdowns by "doing nothing but working." His style was to fling himself single-mindedly into writing, to the exclusion of everything else. He then entered deliberately what he called a state of "elevation", a very focused concentration on complex material with no break for weeks on end. He said that in doing this he entered another world.

> "I try to elevate myself; this is a kind of manic-depressive intuition that I have, to be able to get more work done...It's sort of like being able to concentrate...like going into a trance. I write better, quicker, I can get in a lot more detail...I worked too hard, burned up my mind...it's my total attention focused on the problem, so that people will comment, wake up, what world are you in."

Reflecting back about this working style, he expressed doubt that it made him more effective. Despite feeling initially that "elevation" helped him to think effectively, he later realized that this state actually harmed the work and himself.

In addition to the strains inherent in Leon's style of working, there were several environmental stresses that possibly contributed to

his impending psychosis. First, his immersion in work led him to isolate himself for weeks on end. Second, he suffered from feeling that he received no support from his department. He felt that his advisors were overly critical, forcing him to revise his work many times with no encouragement. He described, in a way that appeared to be a realistic judgement, the reputation his department had for being competitive and harsh to its graduate students. Last, in the months prior to the writing of the thesis proposal, he had experienced a great deal of stress and isolation doing field research in rough, dangerous conditions in Africa. Thus he described several environmental stresses which possibly contributed to his first psychotic episode.

The second episode concerned a brief depression which began shortly after discharge from the hospital, having improved from his first psychotic episode. He couldn't find work for six weeks, and "almost went down the tubes all over again." When he found work , he improved immediately.

These first two episodes, one of psychotic breakdown and recovery, the next of depression and recovery, give the first indication of what Leon's pattern of interactions between developmental striving and disorder might be. The process of becoming intensely involved in intellectual work seemed to lead him to have crazy thoughts. He appeared to choose total immersion in writing and to enter deliberately the state of "elevation", which then led him to isolation, strange ideas, and ultimately to psychosis. However, involvement in work may be a necessary, but not sufficient, condition for Leon's psychosis. The environmental stresses of isolation, the unsupportive atmosphere of his

department, and the stressful period of field research in Africa may have pushed him to "elevate" himself beyond the point that he could control. He agreed with his interviewer (Strauss) that he may have been "primed" for the breakdown because he started the process of writing while in a vulnerable state due to these external stresses.

While Leon's involvement in work seemed to lead to psychosis, his lack of involvement in work seemed to lead to depression. His self-esteem appeared to be tied to developmental striving, so that being cut off from work endeavors led to the loss of self-esteem and hence to depression. "You have to have a role, and that's what work does. Without a role, you have no definition of yourself, you have a lot of time on your hands." As this and subsequent depressions indicate, without work or when hindered in his desire to be engaged in satisfying work, he was unable to sustain his self-esteem.

Following the hospitalization for psychosis and then the brief depression (episodes one and two), Leon was able, over the next five years, to continue working on his dissertation research. He occasionally noticed symptoms of "crazy notions, bizarre thinking, cryptographic messages," at which times he would take trifluoperazine (Stelazine) and the problem would go away. He does not give enough information to reveal the context in which these symptoms arose, but with his awareness of them he was abe to self-medicate, and this was sufficient to control the symptoms.

Episode Three

The third episode, which involved a period of mild psychotic

symptoms, occurred five years after his first hospitalization. He spent the intervening five years doing research, then began writing the body of his dissertation. Just before beginning to write, he had again been working in Africa where he had been shot at by guerilla fighters and experienced rough field conditions and unsupportive faculty advisors. While he was away, his wife initiated a divorce. He returned to the U.S. where he again became involved in "elevating" himself while writing. He became absorbed in "mind games" of numerology and cryptography, in which he read meaning into objects and other people's behavior and thought he was secretly sending and receiving messages. He began studying the Greek and Russian alphabets in order to create more complex meanings in the messages. He says this was

> "actually fun for me, but obviously I was under a great deal of stress, and being crazy was kind of a nice avocation...it was relaxing...I was beginning to accept odd thinking as being therapeutic for me...I could be two people, the insane person on the one hand, and the scientist writing up his dissertation on the other hand."

Just as in the first psychotic episode, the combination of Leon's style of working and several environmental stresses may have contributed to this period of psychotic symptoms. The environmental stresses included the same harsh, critical dissertation advisors, the "priming" factor of stressful field research, and the divorce from his wife.

Episode Four

The psychotic symptoms of Episode Three did not worsen, and Leon was later able to move to a new city to start a post doctoral position at a new university. When he arrived he was told that he was assigned to a research grant in a field different from his own because the money for

the original grant had not come through. This upset Leon, but he decided to try working on the new project. He felt that people in the department treated him in an aggressive, unwelcoming manner, that he was not given any clear laboratory space of his own, and that the new work involved killing animals, a task he hated. The work also reminded him of a painful love affair he once had with a coworker in a similar lab. Three weeks after beginning this unwanted job in the new and stressful environment, he spent his Christmas break furiously rewriting his dissertation, then "collapsed in a heap of ashes." He tried to continue working on the post doctoral research, but instead became overwhelmingly depressed, felt suicidal, and ended up in the hospital being treated for depression.

Again, a pattern is discernable in the occurrence of the third and fourth episodes (moderate psychotic symptoms followed by severe depression). It appears that Leon's psychosis was once again "primed" by external stresses (the field research, unsupportive advisors, and divorce). The stressful process of writing then led him into psychotic thoughts. Leon experienced the thoughts, however, as an enjoyable relief from the intensity of writing the dissertation and coping with departmental criticism. This sense of enjoyment may explain in part why he was vulnerable to psychosis. If the symptoms were felt as relief from his stresses, he may have allowed the psychosis to occur instead of self-medicating or seeking help. However, the psychosis did not progress to a debilitating level, perhaps because he was looking forward to a more supportive, collegial environment and more independence in the post doctoral position. The ensuing depression occurred in the context of

a tremendous disappointment in work. He had been looking forward to more autonomy in directing his research, and was very upset at having his independence thwarted by being forced to switch scientific disciplines.

Why does Leon experience psychosis at some times and depression at others? The pattern that emerges from the first four episodes indicates that different symptom responses are associated with different kinds of situations.

To address the occurrence of psychosis first, there seems to be an interaction between the way Leon works and the external stresses that contribute to his disorganized state. However, when Leon responded to the question, why psychosis at one time and depression at another, he seemed to detect a vulnerability to psychosis emerging directly from the process and content of working:

> "I was very into numerology, so when I had to do a lot of mathematical stuff, that would click on the switch for psychosis, that would lead to that type of bizarre thinking, and I really feel pretty strongly about the fact that I'm a very dependent person, and what really led to the depression would be losing support."

What seemed most important to him in association with his psychosis was the work itself. The mathematical content of his work seemed to shade over into numerology, a form of his bizarre thinking which then apparently became uncontrollable. However, it is important to remember that in addition to the contribution of his "elevated" work state, Leon has also talked about the role of cumulative stresses "priming" him for a breakdown. The combination of work style and external stresses may be necessary for his psychosis.

Depression occurred, Leon has indicated, in association with loss of support. The problem of loss of support was associated, in turn, with

loss of control and independence in his work life. The first fairly brief depression (episode two) caught him during the vulnerable post-hospitalization period while recovering from psychosis, and occurred in the context of unemployment. The losses of support during that time may have included loss of his sense of internal stability following a psychotic episode, and loss of external stability due to unemployment. The depression disappeared as soon as he found a job. The second, more profound depression (episode four) began during another vulnerable period following a series of major stresses. Leon had hoped for an academic environment that would provide support and allow for autonomy. Instead, he was confronted with loss of the concrete support of the promised grant, loss of the hope for a supportive environment, and loss of control over determining the content of his post-doctoral work. In a later interview Leon confirmed that loss of independence was an important contributor to his sense of loss:

> "I didn't expect to get sick, I expected to keep on working. I had some ideas of what I was going to be doing, and I was unable to do those things, and a great deal of frustration resulted from that, I got upset, I almost feel that I deserved a period of rest, but I also feel that I deserved for the first time to do something on my own independently and that I was denied, by the circumstances of coming here (to the post doctoral position). I had thought that following the completion of the doctorate that I was going to have more control over things."

Leon may have been able to avoid the depression of the fourth episode if he had continued his more typical, intense involvement in work (although continued involvement in work may have furthered the psychotic symptoms he was already experiencing in the third episode). But the bleakness of his new position resulted in profound disappointment and loss, and hence he was unable to ward off depression.

Another clue that Leon's psychosis and depression may have different triggers is that Leon's level of internal awareness of the two states seemed to be different. His awareness of the onset of psychotic symptoms while in Africa had enabled him to take medication. However, he emphasized that depression was inevitable, and that only different external circumstances could have prevented it:

> "You said you could have pulled out of the depression?"
>
> "I had asked if I could do other research...If I had gotten that, I think I'd have been a lot happier. I would have felt good about myself, to do a job that I could do...and what I needed most was to feel good about something. I had just subjected myself to three years of research and continual criticism and what I needed right then was a boost."

This statement seems to support my hypothesis that loss of control over work tended to lead to depression. Leon felt no internal control over this situation, but described it as externally caused and inevitable:

> "It just seemed like an inevitability...it happened so slowly, there's nothing I would have thought of to change things...the first half of the depression is something that people who are with you are not aware of in you...you go through the first half and by that time you are lost, you're sucked in, so that the second half of the depression, which is a quick spiraling thing...it's very rapid."

A third aspect of the difference in onset between psychosis and depression is that the nature of Leon's contribution to the two states was very different. In depression he felt caught in an inevitable spiral of poor performance, which furthered the initial blow to his self-esteem:

> "Every task you undertake, whether you're competent enough to do it or not, it doesn't matter, every task becomes an impossibility, and reinforces failure, and since you're not functioning well, you can do nothing satisfactorily and it's negative reinforcement, and that's a spiral."

His contribution to depression was to remain passive when confronted with external events and to ignore the possibility that he really was

competent enough for the tasks at hand. His contribution to psychosis was much more active: to "elevate" himself and play "mind games" as a means of escaping external stresses and enhancing his ability to work. Finally, although there were clearly several differences between the way Leon entered either psychosis or depression, the common prerequisite for both seemed to be a series of stresses which contributed to a vulnerable, "primed" state:

> "There's just a shit load of things that hit the fan all at once. I was in Nigeria, both times, before both breaks; this time, everything started breaking down, from my car to my watch to my job prospects to the job I was doing to money, everything just went kaput.... Writing a dissertation and rewriting it and rewriting it is a pretty big blow to your ego, your sense of self-worth, because every time you write something they tell you it's a bunch of shit, they tell everybody that...I'd been writing the dissertation all summer and all fall, and by the time I'd finished it I was selfless, all they did was tear it apart, over and over and over again, and you know, that's very hard on you, and they do it to everybody, and it's very common for someone, after a dissertation is written, to have a depression or a slump, 'cause it's mental castration."

"Resting Period"

By the third interview, six weeks out from his second hospitalization, Leon appeared to be in an asymptomatic "resting period." [1] He said, "I'm cruising...things have kind have leveled off." During this period, an interaction between development and disorder was evident as Leon began to reevaluate his developmental goals directly as a result of his disorder. During the interview he sounded calm and speculative. He mused about the etiology of his problems and what he might do about them:

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[1] This is a phase Strauss et al (70) have labelled "moratorium", and Sparrow (66) has called "woodshedding".

"Now I might not do any more numerology or cryptology...it's fun at first but then it's crazy later...You get hit with a poor support system, that's frightening if you think you're going to be abandoned, in other words, I'm going to have to be very aware of these things now, so if I do lose a support system I'm going to have to shore myself up, either in therapy or in some other fashion, friendships."

The "resting period" revealed Leon's attempt to find a middle ground between psychosis and depression, and between his intense drive to achieve his goals and his need to take time to reassess them. During this period he tried to choose activities that would allow him to avoid symptoms. He felt that continuing to work in the lab was important to occupy his time and prevent depression, but he avoided becoming absorbed in work in order to avoid the intensity associated with psychosis. He knew that the question of how to work was complicated because work affected both his illness and his self-esteem. "Without work I would have lower self-esteem; why have I worked so hard in graduate school and not be able to be employed now." He wondered how to pursue his work-goals at a level that would both satisfy and protect him. "I'm shying away from being a member of the academic ladder...I'm very sensitive, but I'm trying to develop coping mechanisms about what is important."

Eventually, the "resting period" became frustrating and he felt unable to remain at that level. He could not accept that he might need a period of less effort:

> "One of the things that I feel is that I should be doing more, I should be producing as much as I was six months ago...everybody that's been there before you (in this lab) just expects you to be working at a formidable pace. That's the stigma, is that now that you're better you're supposed to be functioning and producing as well as anybody, rather than imagining that there has to be an organization period, a settlement period."

He seemed to be influenced by a combination of both inner drive to work harder and the academic environment that expected more work. An

indication of how the disorder led him to reassess his goals is that he began wondering if he should change his work situation to escape the inevitable academic pressure.

> "A patient starts to wonder...whether he should be in the present role; makes it hard to know if a change should occur. Maybe it's important to step out of that environment and look for something new. That's very unsettling in itself, because then the patient is faced with moving into a totally new situation."

Episode Five

The tensions between needing to rest, wanting to continue striving, and wondering about the need to reevaluate his goals led Leon to a period of mild depression and anxiety. He discussed this period during the fourth study interview, four months after hospitalization. This fifth episode is important because by this time Leon appeared able to cope with mild feelings of anxiety and depression as normal developmental problems, with no ensuing symptoms of mental disorder. He did worry that, given his previous experiences, these feelings portended the downward spiral into severe depression. However, they occurred in the context of expectable life events and stresses, and Leon was able to manage without becoming overwhelmed. His mild depression seemed to stem mainly from anxiety about how to cope with stress rather than from deeper feelings of loss.

Leon seemed to use the "resting period" and the period of "mild depression" as a time of reorganization and reassessment. He expressed dissatisfaction not only with the problems stemming from his disorder, but with his own confusion about his developmental goals and values. The mild depression arose out of frustration at still feeling psychologically

vulnerable after his hospitalizaton, and out of his anger at the amorality of academia and his own apparent loss of moral commitment. He had turned down a job in South America that he felt was perfect for him given his training and desire to do practical work, and he was extremely disappointed in himself for feeling too weak to take it. He blamed his breakdown for having hindered him in his career progress. He felt frustrated by his low energy and apathy, since he saw himself as an idealistic person who wanted to use science to help others:

> "My motivations for doing something like that have to be very much that I feel like I'm making a contribution to mankind...the Peace Corps ethic...I have to feel like I'm doing this type of thing in good faith."

He felt angry at others' values as well as confused about his own. Compounding his frustration with his own flagging ideals was his anger at the backstabbing academic bickering around him that he called "a hype." He noted that for people to succeed in academia they tended to focus on their own interests and on theoretical science. He felt critical of people who rushed into academia after their education without stopping to think about what might really be important to them.

It was hard for Leon to notice that having his disorder might have allowed him the possibility of an ultimately productive inner struggle about his values. Yet the trip to South America actually revealed his strengths. He had been able to make the long trip to interview for and assess the nature of the job. He felt that he wasn't yet psychologically resilient enough for the primitive bush conditions of the job. He seemed to have grasped how the problematic political situation of the country made the job inherently difficult. But he also expressed anger at himself for weakness, saying "I don't feel very satisfied and I don't

feel very secure." He rejected the suggestion that there could be growth-producing aspects to his experience: "I can't see right now that these last six months could have been productive." The anger he expressed at others and himself may have been part of the process of sorting out what was important to him. The conflicts he felt between his ideals and the priorities and behavior of those around him might be interpreted as a normal developmental conflict.

What may have been implied when Leon expressed fear of another deep depression is that he felt unable to recognize the difference between with normal anxiety and potentially pathological depression. He said nervously that since no one else noticed that he was getting depressed until he was at the very bottom, the depression may actually have occurred suddenly and without warning.

> "It worries me because that type of thing could happen tomorrow again...what it says is that I have very little control."

This contradicted his insightful description in an earlier interview of the complex process of slow spiralling into depression over several months. He worried that his current disinterest in work and decision not to take the job were signs of pathology rather than understandable lulls:

> "I don't feel terribly creative or energetic. I feel I ought to be doing more than I'm doing. I'm disappointing myself very much in not being able to get some character, some creativity into my life...it's been painfully slow this time in straightening things out."

It may have been an emotional achievement for Leon to tolerate the experience of a "neutral" time and to withstand some feelings of depression and anxiety. Although he was unwilling to agree with his interviewer that this period might be productive, he did agree with the

suggestion that it was a "neutral" period:

> "It's probably true in many ways, that it's a time when I, just to not be involved in something; to keep on investing oneself you run out of self after a while."

Despite his feelings of anxiety, Leon managed to maintain an even keel. He continued to work in order to be occupied, but remained on an uninvolved level. Thus he managed to ward off depression by working, but avoided disorganizing strains by not working too intensely. He emphasized that earning a pay check was crucial in maintaining his self-esteem. He made good use of available support systems (hospital therapy group, therapist, medication, girlfriend and friends). By all these means, he sustained himself during a time of mild depression, and did not spiral downward. Leon began testing the waters of developmental striving to see how fast he could go without triggering disorder. The lesson of Episode Five may be that a learning process can accompany the process of emerging from disorder.

Episode Six

The sixth episode is an example of development and disorder interacting as Leon became more involved in work and his symptoms began to increase. Six months after hospitalization he experienced a week of confusing, psychotic, guilty thoughts, and an intense suicidal impulse. "I had a real rough time these last two months...psychosis popped up again." During the interview in which he reported these events, he sounded pressured, irritable, and grandiose. He had been increasingly involved in work and taking a more independent role. He expressed impatience and the desire for more challenge, and he desperately wanted

the new job he had just applied for: "It's frustrating to me that I can't move as fast as I want...I'm just like a little infant going, aaaah, I want it!" The job was in his scientific field but in a non-academic setting, involving the applied research he preferred. He felt he could learn a lot in the new position and would have the opportunity to supervise others and direct projects.

In discussing his desire for the job, Leon revealed a fuller picture of himself as a person who is driven to work hard but who is beginning to realize his vulnerability to disorder. He expressed the difficulty of making developmental adjustments because of his disorder, but he also indicated the possibility that the disorder adds excitement to developmental striving.

> "I have my days when I think I won't even be able to do the job, the next day I'm overwhelmed by confidence, followed by a day where I'm just overwhelmed by everything...There's always going to be ups and downs. It's a difficult thing for me to adjust to. In any job, any situation, I'm used to living on the edge. Practically speaking I think I want to fall over sometimes, because it's tougher to climb out of the hole, a self flagellation thing."

He seemed to experience both the difficulty and the excitement of "living on the edge," because not only did pushing himself hard lead him to feel the strain in dangerous ways, but it was also something that he enjoyed and thrived on.

> "Living on the edge of a sword or a cliff, I'm always pushing myself, trying to achieve, more than necessary, it works but it might not be worth the effort because the strain is unbearable, and ...one of the ways I've done it, when I feel the strain, I have to elevate myself, put myself into a nicotine or coffee trance or just a plain trance, and that's very difficult for me to do."

Leon revealed in this statement more clearly than ever before that he viewed the "elevated" state as a strategy for coping with the strain generated by work; this echoes his previous assertion that psychosis is a

fun relief from stress. The picture is of a person who is driven to work hard, who pushes himself to achieve a lot, but who feels terribly strained by the effort. As a strategy for coping with the strain he tried deliberately to change his perceptual state. In the past he made use of alcohol, and during this episode he tried cigarettes, coffee, and his inner ability to "elevate" himself into a state of trance. The trancelike "elevation" is a way of escaping strain as well as a way of trying to accomplish more and maintain the excitement of "living on the edge."

During this period of psychotic thoughts Leon began for the first time to wonder actively how to find a balance between his work goals and the strain that led to symptoms:

> "What I have to start learning with work is that I have to be able to accomplish it...at a steadier pace, instead of trying to do it all at once, real fast. It's difficult for people to pace themselves...but it takes a terrible toll on them, their families, their existence...If you overextend yourself, you pay for it...Scientists are just like bluefish, they grab something and run like hell... until there's no more line left, and all of a sudden, snap! That's it. Knowing limits, when to take a vacation, but even then they're stressed. I wonder if it's all worth it."

During this episode Leon also revealed more information concerning the <u>meaning</u> of his psychotic symptoms. Particular conflicts erupted into psychotic expression. Leon's psychotic symptoms may be not only the consequence of working harder, but also an indirect expression of anger at his colleagues' academic narrowness and competitive behavior. Because he felt extremely guilty about his anger, he directed his hostility largely at himself, resulting in suicidal feelings:

> "all those feelings were being turned against myself, I was so guilty about them...and instead of hating other people and wishing them ill things, I was turning all of that against myself."

The guilt involved possible ways he had hurt others and crimes he may have committed. For instance, he said he believed he had the power to compel his professor to jump off a garage roof. He explained his aggressive fantasies by saying:

> "Every human being thinks lousy things about other people, every day, it's a very natural instinct. To suppress them is important, it's part of disciplining yourself, so you can think sensibly about the way to deal with people."

He didn't allow himself to participate in the arguing and attacking in the department, but felt so guilty about feeling anger that he wanted to "vindicate myself, purge and cleanse myself."

Why did Leon repeat the pattern at this time of becoming intensely involved in work and simultaneously developing psychotic symptoms? Why did his "neutral" period end?

> "It's a self-destructive tendency. Because pressure. Job pressure. That's all I ever do is work anyway, I think about it night and day. Two months ago...I had convinced myself that I didn't have to do more. But I started seeing the carrot, started feeling unproductive, wanted to push myself and do more."

Why did the carrot reappear? Where does this drive come from? It seems to have reemerged as his angry reaction to perceived challenges and rebuffs from others.

One perceived challenge was Leon's sister's statement that he would have to realize now that he couldn't be a great scientist:

> "That's bullshit! I'm a very very good scientist...I have the instincts of an animal, I can talk to animals just about...I can go into someone's yard when there's a ferocious police dog there and look into his mouth and he won't bother me, that's something I have. See I know she's wrong. At the same time...you don't have to go looking down the throat of a lion to live a normal life. You don't have to push yourself to that extreme..because it just ends up tearing yourself apart."

In this way, Leon's drive to work appeared to be part of feeling

compelled to prove his sister wrong. Another perceived challenge came from a professor. Leon explained that when he turned in the field notes he had been collecting, his supervisor threw them back saying brusquely, "I've already got all this information." Leon reiterated: "that's the carrot." He was angry at the professor's lack of receptiveness to his work, and he interpreted it as a test, since he was sure that he had more information and better conclusions than anything yet published. He seemed to begin gearing up energetically in order to prove that people were wrong about him. He said the same thing happened while working on his dissertation; instead of giving him the guidance he felt he needed his professor said, "Leon, it's up to you."

> "It's up to you if you want to do it: that's a way of coercing people...just throw out the bait, the hook, and they'll run with it. Kind of shame them into doing it."

He perceived that he was being challenged by his sister and his professors, and he responded with full, angry energy by plunging back into work. It is unclear whether the professors were as laconic as he portrays them or whether their intent was indeed to push him to be more independent. In any case, his furious plunge back into work in response to perceived challenges seemed to be full of defiant anger at being "coerced" and "shamed." He was susceptible to perceiving these suggestions as a challenge because of guilt that he had failed to live up to his obligations:

> "Of course it's up to me, it's my obligation, it's written on the bloody diploma, you know, rights, responsibilities, and obligations...It's up to you, you got the diploma, read it. It's coercion. Basically it's the way this whole system works, a capitalist system, works on guilt feelings." (said irritably).

Leon's pattern of psychosis associated with work and the meaning

behind the pattern has now become clearer. He appears to begin working intensely in response to a perceived challenge. He imbues working with anger because he feels that his abilities are being put down, and because he feels guilt about his own perceived failures. His anger at his colleagues leads to more guilt which he then turns as hatred against himself. The work itself involves focusing his attention closely on difficult, detailed material, so he enters his "elevated" state both to focus better and to escape the other stresses.

Investigating even further back to discern the origins of Leon's guilty conflicts around the obligation to work, it appears that there is a deeply rooted part of himself that denies the existence of human limitations.

> "You seem more pressured than when we last talked."
> "I am."
> "And yet you feel you're doing better."
> "I am."
> "I suppose they both may be true?"
> "And therein lies the danger because I have to find out how far I can take this pressure. Because it has to stop. My father has always told me, there's nothing you can't do if you apply yourself to it. I honestly believe that's true. At what sacrifice, I don't know. But there is nothing the human mind can't do...You've seen amazing men."
> "I've also seen people with limitations."
> "There are limitations, but I believe a lot of them could be overcome."
> "Some, I guess. You like your work?"
> "Jesus, I don't know!" (Said despondently).

In this fascinating exchange Leon asserted the contradiction that he could do away with limitations, but now also suggests the price of not modifying the pressure. This may be a key to the meaning behind his drive to work and his guilt about not living up to his sense of obligation. He apparently learned while growing up that all one has to do is "apply yourself" and one ought to be able to accomplish anything.

It doesn't sound as if this message also included the need for self-awareness or the need for time away from applying oneself, or that there might be other purposes to life besides limitless achievement. He became despondent when asked if he liked his work, perhaps because the question implied may have implied that there was a tremendous cost in being consumed by working. He may have wondered, what is the meaning of life if I don't enjoy it? In response to this realization, Leon appeared to be struggling to find a balance. As he said later in this interview: "I'm desperately trying to find my own pace."

Episode Seven

The seventh episode was a period during which Leon improved while struggling with many stressful life changes. He was able to cope with them as normal developmental events without becoming symptomatic. In the ninth month interview after hospitalization he said: "Things are starting to gel." At the time of this interview, he was about to get married, move to a new city, and take on a new, responsible job for which he had high hopes even though it was in a politically problematic situation. He described the difficulties the job would bring and was annoyed by their pettiness, as he had been by the difficulties in the post doctoral position. He had been told he was hired for the new job in part as a political wedge between two competing people, and this reminded him of the frustrating political infighting he had experienced in previous positions.

> "I have an ideal, why doesn't everyone else. I don't know what I'm supposed to believe in after awhile...I'm supposed to grow up and be more interested in myself than other people. Survival mechanisms are important, but I can't get into this backbiting thing...Here, I'm a technician, there, I'll have people working under me, but what am I? I'm a wedge. It's no wonder I'm a schizophrenic, or whatever I

am...I don't feel like I have any control."

Here Leon stated a common adult developmental issue of how to handle his ideals yet cope with politics and confront the conflict concerning control over work. The problem for him will be to cope with these issues without triggering an exacerbation of his disorder.

> "Evidently I'm sensitive, if the bottom falls through...real possibility of another breakdown. I don't feel particularly like I've got a hold on all the possible mechanisms to avoid that... It has always been when I move and relocate into a new situation that I'm "primed." I don't feel that I'm "primed" right now, but if I got terribly disappointed I don't think I'd take it too well...It got very complicated and confusing exactly how sturdy I am."

Here was an apparently realistic assessment of the problems involved in making all of these changes. Leon felt the importance of both the "priming" quality of difficult external events and his internal susceptibility to a breakdown as triggered by a disappointment.

When interviewed two months later, he had begun all of the new changes and was coping with them without any increase in symptoms. External events had worked out well (the "bottom" had not fallen through) so that despite the potential for cumulative stresses to weaken him, nothing happened to push him "over the edge." Then, when he began the job, he felt excited about the opportunities and the autonomy of the work, which were exactly what he had been wanting. Thus, despite some difficulties (some people resented his responsibility and his political "wedge" role) he was not confronted with any frustrating barriers. He reorganized the department to be more efficient, obtained grant money and initiated research projects, and maintained his research connections with the post doctoral institution that had become more interested in him because of his new position. Leon seemed to be having tremendous

success.

Episode Eight

When followed up one year later, Leon was still doing well; I consider this year of good functioning to be the eighth "episode." He had continued to be very successful in his job, stimulating the department to become more than just a competent bureaucracy. He developed programs and brought in recognition and grant money, and published and presented several papers. The success was good for his self esteem, although he still at times became overinvolved in work and had some minimal symptoms of "elevation" and ideas of reference.

Why was Leon able to take on many stressful changes and not become symptomatic? First, the external stresses may have been less intense prior to the seventh and eighth episodes than they had been prior to the first four episodes. As Leon himself said, he may not have been as "primed" for breakdown as he was during previous stressful times. There were many stresses prior to his move to the new job, but despite his anxiety about them things actually worked out well. Again, this situation supports the hypothesis that it is not just cumulative stresses that bother him but the meaning of the stresses. When he started his new job, he didn't suffer a disappointment, but rather, he started a job doing something he really wanted to do. If he had in fact been confronted with the realization that this job, too, was not what he had expected, he might not have done as well.

Second, there is the importance of having had some success at achieving developmental steps. Leon had a year during which he coped

adequately with mild depression, and during which he struggled to balance his need for goals and achievement with his need to take his vulnerability to mental illness into account. He chose to push on with his life, which seemed inevitable given his drive, but he was able to decide that an academic position was not for him. Instead, he chose a job where he could use his scientific knowledge to solve practical problems, and where he could supervise others rather than be isolated at the bottom of the hierarchy. At his new job he was not troubled by the type of extremely unsupportive atmosphere that had been so difficult for him in the past. Instead, he had as much independence as he wanted and made good use of it with the talents that he had: he created structure in a disorganized department and organized research projects along the lines of his interests. He had both autonomy and structure. The feeling of success seemed to have its own positive momentum for him. Since work is so important for his self-esteem, this work success seemed good for him. With his history of intense involvement in work tending to lead him to become more symptomatic, he will have to continue to be aware of the need for balance.

Summary

In summary, we have seen the progress of a man who had a vulnerability to mental disorder that manifested itself as either psychosis or depression. Over the course of the interviews he improved from the two lowest points he had ever reached, one of psychosis, one of depression, to become a highly functional person at a responsible and demanding job. He continued to have occasional mild symptoms in the

context of overinvolvement in work, but these seemed to be manageable.

Leon's striving in his career reflects his developmental drive to succeed. Even without having to cope with breakdowns, he would still be struggling with difficult challenges along the way. These are the obstacles which, for most people, do not lead to mental illness. Leon was in a process of discovering that he was vulnerable to mental illness, and he had to learn how to pursue his goals while avoiding this vulnerability. He did this successfully by choosing a job that allowed him much freedom but that did not pressure him to move faster than he wanted to. Although he maintained the propensity to get very excited about his work (and to become symptomatic), he expressed an increased awareness of the need to modify his drive to "look down the throat of a lion."

The picture of improvement in functioning along with some improvement in symptoms reveals a person who has matured, as in a natural developmental progression. Leon struggled with the combination of vulnerability to mental disorder and tremendous drive to succeed; he may have managed to decipher the interrelationship for him between disorder and developmental striving so that he could work towards an inner and outer balance.

Episode	Time	Psychological State	Precipitants	Contributing Factors	Note
1	5 years prior to study, 1st hospitalization	Psychosis (Hosp.)	Overwork, "elevation"	Mathematical work alcohol criticism & lack of support tough experiences in Africa	"Low Turning point" [1]
2	After 1st hospitalization	Depression	No work		Improved when started work
3	Before study entry	Psychosis	Working on thesis	Mathematical work Psychosis a fun avocation Lack of support, advisors Divorce Back from Africa	
4	At study entry; 2nd hospitalization	Depression (Hosp.)	Postdoc not give him what promised; Dissertation finished	Moved Stressful lab situation	
	6 weeks after dc.	OK; "resting period"		Has support Postdoc still frustrating, but he's working	"Moratorium" or "Woodshedding"[2]
5	4 months after dc.	Mild depression	Contemplating life change	Little support Disillusion with academia S.America trip showed vulnerability	Disorder allows, promotes re-evaluation and change; struggles with values
6	6 months after dc.	Brief psychosis	Working hard, "elevating" Perceived challenges	Anger at academia	
7	9 months after dc.	OK	Got new job; difficult, but has autonomy.	Married, moved	A million life changes
8	24 months after dc.	OK	Success in job		

Table summarizing Leon's Course

[1] A term used by Rakfeld & Strauss (55)

[2] Terms for "resting period" used by Strauss et al (70) and Sparrow (66).

DAN N.: THE SIGNIFICANCE OF INNER CHANGE

I now turn to the second subject, Dan, and again use the method of detailed examination of his history as given in audio-taped interviews. In this instance, these interviews span one year, since Dan is currently just starting his second year in the study. Dan is a thirty year old, single, Caucasian man with the diagnosis of schizophrenia, who has been struggling with fairly unremitting psychotic symptoms for twelve years. His central concern is striving to work despite hearing voices.

I begin by describing the interactions between instances of Dan's developmental striving and symptoms of his disorder. Dan's voices get worse as he becomes more successful and diminish when he gives up efforts to achieve. For instance, the voices became worse when Dan took a course at a community college, and diminished when he was doing custodial work.

Furthermore, I propose that Dan is struggling with a developmental conflict between striving to change and achieve goals, and ambivalence about leaving the past behind. Dan conveys that the voices themselves seem animated by past conflicts, so that I am led to use an interpretation, common in psychodynamic approaches, which suggests that the content of hallucinations reflects important issues. Hence I postulate that the voices can be seen as a window into Dan's psyche. Thus I will look to his story of the origins of the voices in the past, and the content of the voices during the periods when they become worse, in order to suggest what the developmental conflict is about and where it comes from.

Finally, I look at how Dan begins to describe changes in the way he

copes with the voices and the conflicts they embody. Although behaviorally he does not change significantly, he appears to be making important internal psychological changes. These changes can be seen as an aspect of developmental progression interacting with a psychotic disorder. Dan may be involved in a developmental reintegration of the disparate parts of himself as a precursor to improvement and further development.

I will summarize briefly Dan's history and course over the time he was interviewed in the longitudinal study. By his report, Dan had been living with his parents and attending school when he first started hearing disturbing voices around the age of eighteen. He had numerous hospitalizations for these voices and other psychotic symptoms since that time. At the time of the first research interview, Dan came to the hospital because he had been increasingly bothered by the voices. He had been living with his parents and taking a course in astral projection, and he felt that the voices were getting mad at him for learning to leave his body. In the hospital he felt more relaxed and less bothered by voices and delusions of reference.

One month after the first interview, Dan left the hospital for a rural transitional living program on a farm, where he worked thirty hours a week and participated in the life of the community. Over the subsequent interviews he revealed that he felt good for two months, was hardly bothered by hearing voices, and was able to work. With the help of the program, he began to formulate plans for moving to a half-way house in a different city from his parents and for applying to a state rehabilitation program. Before completing the full three months on the

farm, he left abruptly and returned to live in his parent's house. Dan said that his voices became worse toward the end of his stay at the farm, and he felt that his parents needed him.

Once home, Dan improved enough to start working at a well-paying, full-time job in a factory, but managed to keep it only two weeks. He was rehospitalized for five days on a crisis unit, then spent several weeks attending a hospital day program while doing part-time custodial work. After finishing the hospital day program he seemed to spend much of his time at home in bed. Ten months after the initial hospitalization and start of the interview study, and two months after the second hospitalization, he began to see a therapist as an outpatient and to describe feelings of an inner change. At the twelfth month research interview, he sounded more disorganized in his thinking than he had in any previous interview. Still, he had begun working on possibilities for work and school with the Department of Vocational Rehabilitation and ACES and continued to describe internal changes that he felt were important. During the entire period of the interviews he was on fluphenazine (Prolixin) with addition of chlorpromazine (Thorazine) and benztropine mesylate (Cogentin) after the hospitalization.

What is the relationship between development and disorder in this person? As Dan recounted his history and talked about his goals and the voices that disturbed him, what seemed to emerge was a developmental conflict between his goals and desire to change versus his ambivalence about leaving the past behind. Whenever he appeared to be changing too much, the side of the conflict that pulled him to stay the same was threatened, and the voices became worse. I will first describe how this

picture of conflict emerges from Dan's understanding of his symptom pattern.

First, Dan's disorder became worse whenever he reached for a developmental goal. Whenever he got a decent job or went to school, the voices became worse, and he had to quit or drop out. "Because of the voices I couldn't learn, couldn't do what I wanted." They only left him alone when he was doing something unprestigious that he didn't like such as part-time janitorial work.

> "Whenever I do something that I like, that's when they get worse. If I want to put $20 on a thirty to one long shot, the voices are all for it, but if I want to get a job, like work for the post office and try to get benefits, well I got pretty sick and just couldn't do it."

Dan noted this pattern in his life, but revealed nothing about why this might be occurring, until in a later interview he remarked that "...the voices are starting to make sense, like, after ten years I've learned a lot." What had he learned?

> "I wouldn't be sick if I didn't want to do certain things, like if I wanted to go out and be a bum, a complete idiot, instead of going to college and trying to better myself, I don't think I'd get sick, I really don't, I think I'd just accept it as being a crazy person. If I was just a street person, that would be just what the voices want."

Dan is a person with developmental goals. He didn't want to be an "idiot," he wanted to achieve something, go to school, and read books, but the voices said, "Dan can't accomplish something like that, or else we're all idiots". Dan surmised from what the voices said that it was precisely because he wanted to do things that he became symptomatic.

What were the origins of this conflict concerning developmental goals? <u>Why</u> did the voices want him to be "a bum and complete idiot"? What did they hold against him? And who <u>were</u> these voices? In order to

find out who the voices represent, it may be best to look to Dan's story of the origin of the voices.

Dan grew up in a rough neighborhood, and his friend Stuart "was dealing drugs, made a lot of money, threatened me with a gun a couple of times, connections with the mob..." Dan himself once felt secure in his neighborhood reputation of being "pretty tough, I wasn't bothered," until he began feeling that Stuart and others were spreading gossip about him and playing "mind games." These were the people whose voices he originally began hearing. During the interviews he called them just "the voices," but I suspect that the identity of the contemporary voices was rooted in those first voices representing people he grew up with. The current voices said the same things the first voices said, and they seemed to embody conflicts that he had ten years ago concerning his friend Stuart and the background he grew up with. He said,

> "Biggest mistake of my whole life, I should've walked away from that friendship, let him do what he wanted....I tried to guide him in the right direction, a better direction...something kept telling me not to hang around with him, but I kept hanging around with him..."

Dan conveyed the picture that Stuart was a bad kid, and that Dan was involved with Stuart but felt conflicted because he also wanted to live differently. He said he regreted association with Stuart, although he was once attracted to having a "tough" reputation.

> "In the past, I knew how to handle myself. Didn't beat people up. My father used to be in the marines, he was a boxer, he won a lot of championships! (proudly). That is hard to do! But you gotta grow out of it, leave it behind. Like even those feelings, it's what the voices work off of, that I know, they're tough, they work off the toughness...I know I'm tough enough, I never really lost a fight, but the voices, like the people laughing at me, like in the store they'll walk up and go ha ha ha, I don't fight back, I give up, I'm not that type. I'm not fighting back with street smarts, I'm fighting back with books, with life, things that I want to do. But for example, a voice will come up this way, and that feeling of the past, that rowdy

> feeling is there and another voice will hit me and I get nervous, they work off that rowdy feeling."

This statement supports the view that Dan's voices came from the past and expressed an internal conflict he felt about wanting to change. He wanted to leave his "rowdy" past behind, but the voices thrived on the "rowdy" feelings and resist change. Dan felt able to explain this when calm, but said he had a harder time when "people who know me and knew my past" pushed him around and laughed at him, knowing he wouldn't fight back. These experiences "get me real aggravated," he said. The interviewer (Strauss) concluded, "You're trying to change, and the voices and these other things won't let you?" Dan replied, "Exactly". Hence it appeared that he wasn't just trying to escape the voices for relief of symptoms, but rather, he came from a rough neighborhood and wanted to be different from people there and from his old "tough" identity. There is a part of himself which wanted to progress by going to college and getting a good job, and a part of himself represented by the voices which wanted him to fail at everything. What impeded him were literally voices from the past.

An especially guilt-producing conflict may have been the desire to be different from his father, the outstanding boxer. When asked about this relationship he said, "love, I love him." He was clearly proud of his father's achievements in the marines and as a boxer, but said, "you gotta grow out of it, leave it behind." Dan would love to go to college, and said "if (my parents) ever see me at a college graduation I, I don't know what they'd do." When asked what he thought they'd do, he said, laughing, "Oh, my father'd have a heart attack!" When the interviewer replied seriously, "Really, do you think it would be troublesome for

him?", Dan said, "They'd be real happy, that's what I'm trying to say." This was what he meant, but the hint of the conflict there might be if he ever did succeed was present in the joke about his father's death in response to his success.

This apparant conflict between Dan's goals and desire to change versus his ambivalence about desiring to leave the past behind manifested itself in Dan whenever his disorder impeded his developmental attempts to change; these people from the past held him back whenever he tried to be different. The voices said that he was not allowed to succeed in ways they hadn't: "Dan can't accomplish something like that or else we're all fools." He clearly heard the voices telling him that they didn't want to be humiliated by him in this way, and so instead they humiliate him, sneering that he was "earning too much money for a mental patient" and tormenting him to spend all his money on drugs until he would cry and succumb, and harassing him until he would lose all but the most menial jobs. If the voices really did represent people from his past, they were indicating tremendous anger and jealousy toward a person who had an earnest desire to be different; since the voices stemmed from Dan, the conflict they represented was actually a conflict inside Dan which led him to both hold himself back and try to change.

Because the developmental conflict is suggested by what the voices said, who they represented, and what they made Dan do, the voices can be postulated to provide a window into Dan's psyche. What they said had personal meaning for Dan. They represented a conflicted part of himself that he had difficulty acknowledging in any other way. Therefore, investigating his ongoing struggle with his voices may be a valid way of

exploring the expression of these conflicts.

As a first example of how this conflict seemed to be reenacted through the interaction of Dan's developmental striving with his disorder, we can look at what happened when he was living on the farm. He was happy there and, looking back, said that he was less symptomatic because he was out of his usual environment. He was not in his neighborhood, where people who have known him all his life constantly reminded him of who he was, and he was away from the home that he loved, but that was also associated with having symptoms. He was better on the farm than he had been for a very long time.

> "The voices, they're there, but I forget. They're outside, doesn't sound like they're inside. Within fifteen minutes I'm dressed, ready for breakfast, eat, ready for work, I look around at the mountains. They're there, but they sound more like wind or a stream. I go to work and I totally forget. Whenever I take a second to relax, I notice them. It's a big change for me. It doesn't get to me."

It was not until he began formalizing plans to live in a different city from his parents that he started becoming symptomatic again. He was planning to fulfill some of his developmental goals, such as living independently, working, and returning to school, but then his disorder became worse. He felt a pull to return home:

> "I knew something was wrong at home. I was getting a little homesick, so I left. I miss the farm, but I couldn't stay there....Everything was just, go home. I couldn't work, I was walking off the job, heard voices, a little paranoid. I came home."

This is Dan's pattern of doing better and being on the verge of taking an important step forward, when his voices become worse and he can't work. He may have felt that if he succeeded at something he would have changed too much to still be able to identify with his origins, and particularly his family. This identification may be important to him

because his family is his main source of emotional support, so that although leaving home may be a goal, returning home may also be a way to remain integrated and hence safe. Therefore one theory of the meaning of developmental striving for him is that it is risky, and hence failing is salvation because it keeps him from changing too much which allows him to remain safely at home.

I will support this idea by looking at a second example of a situation in which Dan felt better and glimpsed the possibility of changing, but had fears of doing so. While in the hospital, he noted with pleasure,

> "I gotta say, it's different in here, it's easier to talk...I'm not used to this. I've been here three weeks, this is the longest that I went without people coming back after me...and throwing little digs into me...it is nice. I feel funny in a way, it's a little strange. I'm not really holding back...but I don't wanna open up and be carefree."

What would happen if he became "carefree"?

> "If I get too friendly with people, like a real close relationship, they usually come back and, give it a couple of weeks, it always came back to me...I always had to play the fool, sort of like cry so I wouldn't have to get in a fight with them..."

He had been hurt by people in the past: "I've been lied to, treated like a fool, picked myself up so many times..." , and the voices kept these painful memories alive by continuing to harass him. Perhaps he was fearful of becoming too close to people because this might have enabled him to change too much and threatened to take him from his family.

In a third example of his disorder hindering his developmental striving, he dropped out of a community college basic English course because the voices became overwhelming at the time of the exam. Yet he says his dream is to

> "go to college, to figure out myself, to do what I want. I picture when I get older, sitting in a room like this with a desk and the whole library and I've read all the books, that's the type of person I see myself, but I just can't get there, I don't know why."

And as a final example, it is clear that he has been unable to form relationships since his disorder began. He is close only to his family and to an ex-girlfriend with whom he was involved before the onset of his disorder. When asked if he dates he said,

> "I on purpose turn the conversation around and just let people say, aw, the heck with him. I walk away knowing that...I only go so far with people. People don't get to know me. They hit a surface level and then it seems to stop and turn around. I don't do anything about it. I don't know why."

Yet his goal is to "get married and have a kid."

In looking at these examples of situations where Dan was striving to achieve a goal or improve, it is clear that there was an enormous gap between his goals and his ability to reach them. His voices became worse whenever he was on the verge of an achievment (such as moving to a new town and starting new training, taking an exam in a course he has almost completed, or even beginning to talk to people) and he seemed to choose deliberately to give up at precisely that point. Over the twelve years he has had the disorder, his attempts to make small steps forward in the areas of work and relationships have been futile. He seemed no better in symptomatology or behavioral functioning at the end of the year covered by the research interviews than he was in the beginning.

Yet he remained continually optimistic, despite what sounded like little progress. Even after coming home from the farm and doing less well, when asked if relationships had changed since the previous interview, he said, "seems like they're steadily progressing, me being better off. They're getting better, even though I was in the crisis unit,

I'm getting better, handling things a little differently". Why didn't he decide after twelve years that he had a debilitating disorder and may never be able to achieve his goals? Why does someone with such constant troublesome symptoms keep striving?

Perhaps it was because his development was not entirely determined by his symptoms. His seemingly unwarranted optimism may have been based on a genuine inner feeling of hope and progress. This feeling may stem from the positive side to the meaning of striving to work. Working and going to school gave Dan increased self-esteem because these activities meant that he's sane and not a "crazy person", so it was worth continuing to strive for them, despite the potential for exacerbating symptoms. This inner feeling of progress increased when he returned home from the farm, although his symptoms became worse, perhaps indicating the importance of the actual experience of progress in his ability to be around people and work successfully, first as an inpatient, then on the farm. He maintained that experience as a feeling of hope.

There appeared to be an ongoing interaction, which was sometimes a struggle, sometimes a negotiation, between developmental striving and disorder. Dan began to describe changes in the way he coped with the voices and the situations which precipitated his conflicts concerning change. About the voices he said:

> "I know I got a problem, an illness, and I'm not going to let it stop me, I'm just going to have to keep going, a little at a time, and do what I have to do. I'm not going to lie in bed all night... and argue with the voices, I'm just going to keep going...At the farm I forgot a lot of my voices; I'm not going to try to fight back, if the voices get too much I'll lie down, I'm not going to use all my energy fighting off my illness, I gotta go to work!"

He said he wanted to "take small steps, learn to crawl before you walk,

that's what I'm going to be doing." However, the voices continued to bother him whenever he tried to do things, and he said,

> "I don't know what to do about it yet, I'm just waiting...It's like a big change is going on...I'm just taking it slowly, learning a lot about myself. I tried suicide once, been in the hospital fifteen, sixteen times, did a lot of crazy things. I'm starting to see, like the book I'm reading, it came down to a universal law, where's the center of it, where's the exact beginning of thought...like in music, the diatonic scale, where it takes all the piano keys and all the combinations and chords and puts them in one scale..."

Dan sensed a big inner change, even though his external life did not look very different. A progressive shift may have started, from a blind, violent battle between developmental conflicts and symptoms to more integrated negotiated interactions. He said he felt different from the crazy, suicidal self of the early days of his disorder, and although he still struggled with the disorder, he was learning about himself in ways that had inner significance. He appeared to be looking for a way to accept his disorder in order to keep developing, not to give up. In the above statement, he expressed his yearning for order and his glimpse of a possibly useful metaphor to illuminate his condition. The idea in the book that touched him was about a search for a universal law or center, some core idea that might connect all of his experiences into a comprehensible meaning which, like music, could make sense as a process. He seemed almost, at some level, to be discovering that development is an ongoing process. Since the way the disorder manifested itself was a reflection of himself, accepting his disorder could be a functional synthesis of himself, and a tremendous developmental achievement.

Dan actually seemed to be making some small advances towards change with respect to negotiating with his symptoms. Ten months after the hospitalization during which he entered the study, when asked if he feels

in control of his symptoms, Dan replied slowly, thoughtfully, as if saying something he has come to arduously:

> "Try not to make the voices sick or mad, and just go on and keep going the direction I'm going, and hopefully, I can come to a happy meeting point, it seems far fetched but that's what I'm trying to do. Sort of like, things that I went through, things that made me sick, I was trying to reverse it and do all those things to the voices, it sounds crazy but if I just let the voices go and say, look, you did this for twelve years, and I'm not even going to get mad, I'm just going to put it all behind me and take what I can learn from it and go on and lead my life and I'm going to be the person that I want to be, it seems like the person turns around instead of the voices callin' me an asshole just like the voices are tellin' themselves, boy are we assholes for tryin' somethin' like this. And there's no fightin' back, there's no conflict for me, there's no fighting, 'cause I don't have to fight back and hear a voice cryin' or something like that, all I do is go on and live my life."

In other words, he used to fight with the voices and try to do to them what they did to him, and now he has decided not to get mad or fight them. In response, he heard the voices chastising themselves. He seemed to be reaching for a compromise; he would try to get on with his life, but slowly enough not to aggravate the voices. Perhaps he felt that sudden leaps ahead are what make them "sick or mad."

As an example of Dan's new attitude, he described how he was trying to live in reality instead of in the fantasy world the voices expect him to inhabit. For instance, he tried not to get overly involved in fantasies of being a musician. He said to the voices, "Why do I have to be like this because of the way you think I am? Why can't I be the way I want to be..?" This sounds like a negotiation.

Although Dan described his feelings of inner change and gave evidence of a new ability to negotiate with the voices, it is important to note that struggling to change was not easy for him. It apparently involved tremendous effort and the direction was not continuously forward.

Instead, it seemed that the feeling of change coexisted with voices that were sometimes willing to negotiate but were often strident and angry. The struggle with the voices remained vivid and real, much more so than any relationships Dan had with people. Dan reported that even though he sensed a change, the voices said,

> "We won't, you can have all our thoughts with esp and philosophy, but we won't let you in our head. And if I do get into their heads I hear yelling and screaming..If I read one of those books and there's voices in my head, and I tell you something I just learned to help me get better, why should you get mad, why should I even have the voices? They get mad, they come back and they start to get crazy, I hear voices saying, "I got a gun, I got the gun to my head, you better stop right now and get sick or else I'm going to shoot myself!"...these are the voices...Why should I even have the thoughts of a voice saying he's got a gun?" (exasperated).

As a person who heard yelling and screaming and voices threatening suicide, Dan was clearly up against a lot. Despite his optimistic comments, he said that he spent most of the two months prior to this interview in bed. Staying in bed may have been part of a compromise, since he was clearly still very interested in working and studying. The "big change" to which he referred may have been proceeding in small steps, but it appeared to be a necessary inner change in stance towards himself, his disorder, and his voices, before outer changes were possible.

This prediction of an ongoing inner change which may coexist with fluctuating symptoms seemed to have been upheld by the interview twelve months after his hospitalization and first study interview. During this interview, Dan sounded more psychotic and confused, but he also said that he felt energetic and good. He sounded worse than he had at any time during the study, yet clearly conveyed that he felt he was still undergoing big and important inner changes.

Since his central conflict is about changing, and the voices represent that part of himself and his past that resists change, how did they react to the change?

> "I went to the farm, and when I came home I had trouble cause I changed, big change, I lost weight, I cut down on cigarettes, I was eatin' different foods, I only missed two days of work out of a month, those were all things I never did before, and I was doing some pretty hard jobs, I was having fun, had a feeling of, just me, really. Just like me."

The voices objected to the changes, which suggests one reason why he ended up on the crisis unit so soon after coming home from the farm.

By the twelfth month interview, Dan described that a few days previously he had been excited following a successful meeting with a rehabilitation organization that was helping him start a volunteer job. There was a possibility that he could go to a community college if could hold the job. But he also had an evening of hostile and nervous feelings after the interview. It seems that not only did the interview hold out the possibility of success, but that Dan had also made a decision to turn down the organization's offer to help him study music, which had been a long-time dream. Dan felt that this was a realistic decision, because playing music in the past had been associated with taking drugs and feeling crazy. It now appeared that the voices were furious at him for being able to relinquish things that were bad for him, and he was compelled to go to the emergency room to talk to a psychiatrist.

> "One says, drum, we want you to drum, and I'm saying, I don't wanna, cause I wanna try something else. They're gettin' mad, and I wind up in here talking to the doctor on call. Been going on for a long time, twelve years, it's gotta change sometime."

Turning down the offer to study music may have been part of his new determination to avoid situations that trigger the voices, so despite

suffering a terrible night, he still felt that he was changing.

As an example of the inner effects of this change, he mentioned for the first time that the voices are sometimes helpful. When asked to explain, he rambled confusingly about how they helped him to take breaks at work, but the gist seemed to be that this is "sort of like new. Used to be a lot of voices. Now there's not so many voices."

He seemed to be learning both to accept and to negotiate with the voices:

> "I still, I notice that every once in a while I get real nervous, have to stay in bed, or stay in the house, like the voices would be there, like they're telling me I have to go through little things again, at times, just to get better, so I can understand a little better about why I do a certain thing....As far as the voices and my thinking, I can just lay down and accept that, I don't get that sick, at the same time I know I can't do certain things. I can accept that I gotta lay in bed and hear the voices because it doesn't get that bad, and when it does get that bad it's not for a long time."

He had become more accepting of the voices and had realized that there are certain things he cannot do. He experienced these episodes of hearing voices and giving in to them as little tests in the process of learning. What he seemed to be learning was how to respond to the voices in ways that appeased them. This may mean that he must change more slowly and give in to them in small ways, such as lying down when they get worse.

In another example of the inner change, he said:

> "Noticeable change. State of mind I was in. I can look out the window, and I don't see the same things, I see cars, people, but it's not the same outlook. Like lookin' out there and saying, all this, and I'm, like, a little nuts, I have an illness. That's how I used to feel. I didn't just see what's in front of me, not actually see, but just think farther. It was kinda funny. Now I don't."

It sounds as if the change meant he no longer felt that he lived in a different world, but rather, could literally see things the way the were.

This may indicate change in his disorder that is beginning on an internal level.

As well as internal changes, Dan noticed changes in his behavior:

> "I got my social security check today. Last year at this time I would have forced my mother to go to the bank..to get my check cashed...I'd go spend $70 on OTB or jump in my car and drive all the way to Atlantic City. I used to do things like that. Now I say, yeah I want to go, but I'm not going to go and spend all my money."

The behavioral changes were noticeable and important to him even though he did not appear functionally better. In particular, being able to hold onto money was an important change.

When asked how he has managed to change he replied:

> "A real good reason. I didn't have these things anymore. I was on the farm, I didn't have OTB near my house, I didn't have my mother to ask if I could have $10. A real nice place...I think about it a lot, I really do....It's kind of funny. I want to keep the things that I've learned."

The experience on the farm seemed crucial in giving Dan the feeling of what it would be like to not hear voices. Even away from the farm, he maintained a strong inner memory of the feeling of calm. It is as if having once felt good he was able to achieve the feeling more easily. Feeling good seemed to have taught him what to strive toward and to have given him a glimpse of the possibility of change.

> "Certain things don't bother me like they used to and I can handle 'em different. It's funny, I go upstairs and hear a little voice: why don't you lay down? And I go: no, I wanna shave right now, no, I don't wanna...Lay down for a second! Next thing you know, take a breath, I lay down, then the voices start, next thing you know I'm getting shaky and nervous, I'm layin' there saying: I don't wanna, and they're saying: Just go through with it. It's just how my head thinks, how it is. I'm layin' there and will hear one of the voices that used to really bother me not being able to get at me, being a little nervous itself."

He continued to struggle with the voices and they continued to try to control and upset him, but he discovered that giving in more easily kept

the voices at bay a little.

> "I keep tellin' myself, I don't wanna do this, go through fightin' voices where if I start hearin' voices I have to fight em off by trying to make them sick or make them give up...it's startin' to work too, it'll be quiet. Like if I'm watchin' the football game and the audience is yellin' and screamin' it's directed toward me personally - it went away. It's startin' to come back, but different after it went away, for almost a year. I keep tellin' myself, it's too fast to come back, I should take more time away and maybe if I take time away, why would that even bother me, why wouldn't it just go away so I'm not consciously aware of it."

It sounds as if the voices were much worse at one time, then went away, and were now coming back, yet he stills felt that something was different this time. He knew that the symptoms would still fluctuate and become worse at times, but felt that his ability to manage them had become better. For instance, although he had a couple of rough days after turning down the music offer, he said:

> "I went through it and I'm not showing signs of it anymore. If I do get sick, come into talk to a doctor or even come into the five day crisis unit, it'll help, I can't get mad....Try my best not to let my illness take over."

How did he try not to let his illness take over?

> "I might feel a little funny for a while, but I get in the car, go out for coffee, or sit on the back step, or lay down. No ritual. Don't put on music that much any more. Take a ride. Go with my father to OTB."

Were these methods helping him consistently, or were there times when nothing seemed to help?

> "Like the other day, lay there, thoughts about acting out, felt can't take this any more, down to the end. Thought, if I have to I'll go to a hospital, that's it. Came here, (to the emergency room) felt better. Seemed like all hope was lost, but came out of it and I feel better. I got sick for an hour and a half but it's not lasting. That's new for me."

The proposed inner change was apparently subtle; Dan was clearly still symptomatic in painful ways, but he felt that he was handling

things differently. He was able to calm himself down or negotiate with the voices by giving in somewhat and by taking things slowly. Although it meant lying down more often or using the hospital as a support, he noticed that even the most despairing moments passed in less time than they once did. He chose to work part time at the volunteer job and postponed going to school. He said that he changed his expectations: "I'm waitin', people are always telling me not to do too much, hold back." If instead of proceeding more slowly, he were to act the way he once did, "right now I'd be going two nights a week in English 100 and I'd be working a full-time job." He remained optimistic, saying that holding back was good for him, and that "something always works out."

These indications of an inner change may reflect a necessary process of reintegration before further behavioral changes are possible. The apparent paradox is that since Dan was discovering that he had to slow down and strive less in order to explore possible negotiations with his voices, it appeared that he was doing less than ever and perhaps becoming mired in the rut demanded by his disorder. However, he seemed to be achieving a change in attitude toward the voices which was useful, in that he experienced the voices as sometimes helpful, sometimes decreased in number or volume, and sometimes indicating humbleness, all of which gave him hope. At times though, the voices became angrier and more strident, and he was forced to lie in bed. Still, when listening carefully to Dan and attending to the subtle changes in his attitude, symptoms, and behavior, it is apparent that a back and forth process was occurring, rather than a declining one. Accepting his disorder and learning to live with it appeared to be an active process, not a passive

one. Dan explored ways to appease his voices, and he realized that his developmental goals may need to be on hold for a while or approached more cautiously, but he continued to maintain them as sources of self-esteem and hope. Dan was engaged in an ongoing process of inner negotiation and change which appeared to be leading to small but significant outer changes as well.

V.DISCUSSION

A.Summary of Hypotheses

There are two main hypotheses that I will discuss with respect to both Leon and Dan. The first is that it is possible, when examining the course of a person with a mental disorder, to describe a pattern of interactions between development and disorder. The second is that both of the subjects of my study have developed during the course of their disorder. I will discuss each of these hypotheses in more detail for each subject.

1.Leon

As postulated in my discussion of Leon, a pattern is discernible over time between developmental striving and symptoms of disorder. The pattern is that work tends to lead to psychosis, loss of work or support tends to lead to depression, and stressful environmental circumstances are necessary for the full expression of either type of symptom. For Leon, the meaning of work and the circumstances surrounding it seem to influence greatly the timing and expression of his disorder. Work in the context of a competitive academic setting is stressful and less meaningful to him than work in a more practical, applied setting.

Again, as summarized in my discussion of Leon, I hypothesize that Leon has developed. This hypothesis is in contrast to what a "natural history" view of disorder might propose; in such a view (if it considered Leon's life as a person at all), the impact of the disorder would be seen mainly as an interference in Leon's life. Instead, my view is that the

disorder seems to have enabled Leon to develop further. Initially, the disorder hindered Leon's development, by hindering his pursuit of developmental goals. It also appeared that he had a pattern of developmental striving that exacerbated his disorder. However, by maintaining his developmental goals despite the disorder, Leon was able to maintain his self-esteem. Ultimately, the development Leon achieves is in a direction that appears to be closer to his own value system than the direction he had been pursuing. Leon became aware of the combination of factors that led him to be symptomatic. He integrated this insight with his developmental goals in order to alter both those goals and his environment in ways that were useful for him. Hence his development was both external, as evidenced by his improved functioning and completion of developmental tasks, and internal, as evidenced by his ability to integrate the complex problem presented by his disorder into his ongoing development.

2.Dan

As with Leon, I hypothesize that Dan's course over time shows a patterned relationship between development and disorder. Dan's developmental striving persistently exacerbates the symptoms of his disorder and his disorder persistently interferes with his developmental goals. However, he too manages, as does Leon, to maintain his self-esteem by maintaining his developmental goals. Dan's developmental and pathological processes may be linked by the personal meaning in the symptoms of the disorder itself. For instance, the content of Dan's "voices" appears to originate from Dan's past and expresses his ongoing

developmental conflicts. Implicit in this hypothesis is the prediction that if Dan can manage to resolve his developmental conflicts, his symptoms will improve.

I hypothesize that Dan, too, has developed. By the time of the final interview he did not appear to have improved functionally. However, while living on the farm he had experienced a two and a half month period of feeling and functioning better than he ever had since the onset of his disorder. Even though his symptoms became worse when he left the farm, following that time he began to describe a sense of inner change. He continued to emphasize inner change with respect to his attitude and manner of coping with his "voices" during the last few months he was followed in the study, which suggests that it was a persistent process. This inner change was also a change in his understanding and acceptance of himself, enabling him to remain less symptomatic by choosing to move more slowly towards his goals. The inner change also began to be reflected in small but important behavioral changes. For instance, he described becoming less impulsive around spending money and he relinquished activities that had harmed him in the past, such as playing music. This evidence of Dan's inner development may imply a progressive resolution of his conflict with the past - - while realizing and accepting susceptibility to disorder, he allows himself to change to some extent. Fighting with his "voices" less, accepting certain limitations, and pursuing his goals in a way that enables him to be less symptomatic are signs of functional integration of disparate aspects of himself and his experience that he had been previously unable to synthesize. The process of inner change may be a necessary stage before further outer

changes are possible.

B.Contributions From a Broader View of Development

It is questionable even to try to convey development as a neatly organized process over time. Certainly, the raw material presented by the subjects in this study was long, complicated, and confusing. But it was also rich and revealing. Such raw material is not readily amenable to "pat" conclusions. What is the best way to extract and convey the exciting and evolving aspects of the material? The usual form of presenting patient case histories often has a peculiarly static quality. This can occur when an entire history is presented in retrospect, as if the story is neat, over, and there is no ongoing process. Furthermore, if one emphasizes the events surrounding the pathological processes (symptoms, hospitalizations, treatment interventions), this focus tends to bury the person as an individual with multi-faceted ways of being that extend beyond the definitions of his or her mental disorder. In discussing the existence of developmental processes that interact in complex ways with disorder processes, my intent in part has been to suggest a way to bring the myriad facets of the person back into consideration.

To provide some distance and perspective on how development can be presented as a dynamic process and how to consider interactions in this process, I will briefly present the example of a female character from literature, Isabel Archer. Isabel's development is portrayed by a master of complex characterization, Henry James, in A Portrait of a Lady (40).

"I shall always tell you," her aunt answered, "whenever I see you taking what seems to me too much liberty."

"Pray do; but I don't say I shall always think your remonstrance just."

"Very likely not. You're too fond of your own ways."

"Yes, I think I'm fond of them. But I always want to know the things one shouldn't do."

"So as to do them?" asked her aunt.

"So as to choose," said Isabel.

From Henry James, Portrait of a Lady

James presents Isabel as a young American woman of the 1880's who is intelligent, spunky, and excited about the sheer prospect of living; she is clearly a human being with limitless capacity to develop in any way she chooses. She arrives in "European society," where everyone she meets is enamored of her spirit and originality. However, given her gender, the only option available to her for expressing freedom of choice is to choose a husband. I propose that one way of understanding Isabel's evolving development is to view her gender and the experiences it involves as a kind of "disorder" that handicaps her. She is a person hungry for experience, but the experience takes place only in the realm of her relationships with a series of suitors, none of whom can match her inner complexity and energy. Eventually she meets a man who appears to meet all her desires for intelligence, culture, and depth, and who appears not to care about convention. Isabel chooses to marry him based on very limited information and experience. She is terribly misled, because he turns out to be an imposter in all respects. Because of her gender, she becomes trapped in a stifling and conventional marriage since

her husband owns her legally, economically, and morally. Thus her developmental choices interact with her gender. Isabel tries to make the best of what she starts with, even to question it and push at the boundaries of convention, in order to acquire what freedom she can. But she is constrained within her gender limitations to make only a choice of a husband, to make the choice with limited information, and to be stuck with the choice once made.

James shows us in a novel of wonderful complexity and detail that Isabel has developed. She evolves from sparkling innocence into someone wiser and sadder. It is the process of her evolution that is fascinating; her external experiences are not dramatic, but she translates them into inner experience. The novel closes with Isabel in an external situation of stagnation, but an internal one of growth. James leaves Isabel's fate ambiguous, and we are left wondering what choices her inner development will enable her to make.

What can be learned from Henry James about how to convey development as an interactive process? Great novels of character complexity are able to evoke the process of change over time, not by leading us on to the climax or outcome, but by revealing the way the character evolves. There is no inevitability sealed in the characters; they are free to choose, to develop, and we are left with the sense that their stories continue beyond the end of the novel. Such novels also reveal the ways the characters are limited. The power of the ending of James' novel is that it is simultaneously unambiguous and ambiguous: unambiguous in that Isabel's limitations are clearly seen, ambiguous in that James leaves us with the sense that she still has the potential to choose and change.

The experience of following a patient is much the same, since we watch the story unfold over time, and should not harbor any illusions about controlling the outcome. Every person with a mental disorder has the potential to develop by virtue of being human, and he or she is also undeniably up against a difficult struggle with disorder. So how is it possible to convey the richness of the person and the subtlety of change over time?

Perhaps the method of listening to people's stories and asking questions about their lives, paying attention not only to the obvious symptoms of disorder but also to developmental processes, can capture aspects of both disorder and development that have not been noticed before.

A case history is not a novel, but as with a novel, the excitement lies in wondering what will happen next. Thus, by forming hypotheses about what is happening with a person, then testing the hypotheses by attempting to predict what will happen next, we may maintain the spirited sense of anticipation that arises as a story unfolds. Even when presenting a case retrospectively, it can be viewed as a process of hypothesis forming, testing and revision, in order to convey the excitement of the process as it occurred.

C.Additional Considerations

1.Relationships as a Developmental Theme

In this report I have chosen to focus on my subjects' striving to work as the main example of developmental striving, but there are clearly

other important developmental issues in their lives. For instance, I did not examine the ways in which relationships figure in Leon's or Dan's life, although developmental change could be discussed for both of them in terms of their relationships with their families, coworkers, friends, and girlfriends or wives.

Leon, for instance, made progress in his relationships. He emphasized a pessimistic view of his coworkers throughout most of the interviews, but toward the end he revealed that his relationships with his coworkers had become quite friendly. When followed up one year later, he was able to talk more readily about having made friends in his new town. In addition, Leon recovered from his divorce and was eventually able to form a new relationship and to marry. He consistently referred to his new wife as an important source of support. There is much that could be discussed about the interactions between Leon's disorder and his struggles to form relationships; this discussion would involve his painful interactions with advisors and supervisors.

Dan, too, showed some interesting progress in his relationships. His most significant relationships are with his parents. Since his major conflicts (as reflected in his "voices") led him to fear the loss of his "roots" and his ability to identify with his parents, the way he resolved the relationship with his parents may be a central developmental issue. It appeared that as he began to accept his "voices" and fight with them less, he also began to accept his need to remain living with his parents. This appears to have been a good choice for him, since his parents provided support, and he could use them as a base from which slowly to make other changes. As his view of himself became more accepting, his

view of his relationship with his parents became more mature. For instance, he didn't view the relationships as one-sided and dependent, but knew that his parents also relied on him. When he was on the farm he felt that his parents wanted him home, and this was confirmed months later when his mother told him she had influenced him to come home. He also began to be able to observe the financial problems his parents were having and to stop asking his mother for money. Instead, he began to save for the first time, and even when doing volunteer work as part of a training program, decided to take a night job as a janitor in order to earn money to help his mother. He discussed his parents in a tone of loving concern, and it became increasingly hard to discern anything of his disorder in his attitude towards them.

2.Medications

Medications were not discussed in this paper as possibly contributing to fluctuations in course of disorder or to improvement. Both subjects reported that medications were helpful at times in controlling symptoms. At other times, symptoms appeared to fluctuate even when medication dosages were kept the same. Medications may be one factor among many that contribute to improvement of symptoms in the course of a disorder.

Leon had been stable on no regular medications for five years. During that time he would occasionally self-medicate when he noticed the onset of strange thoughts. He experienced psychotic symptoms, followed by severe depression (episodes three and four) when he was on no medications. His milder depression and brief period of psychotic symptoms (episodes five and six) occurred while he was taking the same

medications he had begun during his hospitalization. Clearly the medications could not prevent fluctuations in mood or symptoms, but they may have contributed to Leon's stability during a vulnerable time. Leon's assessment of the role of medications is interesting - -he felt that medications could be useful in helping a person during a vulnerable time until the person could learn new coping mechanisms. When these were in place, the medications would no longer be necessary. In fact, Leon did learn new coping mechanisms in the process of learning about his vulnerabilities to disorder, and while taking medications. By the second year follow-up, he was no longer taking any medications, and despite various stresses in his life, he was managing to cope and not become symptomatic.

Dan had been on medications continuously for the twelve year duration of his disorder, yet his psychotic symptoms became worse in a pattern that had become familiar to him, whenever he tried to achieve something. At no time was the medication able to eliminate Dan's voices entirely. They continued to bother him until he made a decision to try handling them differently. The medications may have assisted Dan with his symptoms, but the biggest change arose when Dan made a decision actively to change his coping strategy.

Medications can play a helpful role in psychotic disorders, but do not seem to constitute a "cure." Investigation into the pattern of worsening and improving symptoms reveals that such patterns exist and involve many factors in a person's life. Medications are apparently only one factor which may contribute to change in the course of psychotic disorders.

3.Alternative Views

There are two levels of abstraction in this study. Each level has possible alternative interpretations to the ones I have highlighted. The first-level, descriptive abstraction of the data from the study interviews makes use of the subject's descriptions of events in his life, my observations of the subject's state during the interview, and the subject's interpretations of what is happening in his life. At this first level of abstraction, one alternative to my interpretive direction is to discount a subject's interpretations of his situation. In fact, studies of factors that contribute to fluctuation or improvement in disorders do not usually take into account subjects' own interpretations of their experience. For example, Vaillant (65) asked male alcoholics what they thought contributed to recovery, but he then discounted the importance of their answers, because "such explanations may reflect the failure of both interviewer and subject to identify important contingencies associated with changes in habit" (65, p. 132). Vaillant argued that addiction and recovery depend on unconscious factors which cannot be directly observed by either subject or investigator. In my view, unconscious factors may determine who is and who is not able to make life changes or reach for support systems, and failure to ascertain these unconscious factors seems likely to be a failure to identify important contingencies. However, asking people what they think contributed to their recovery (or to particular patterns of disorder) may also be accurate or at least approximate a valid explanation. Rather than simply ignoring such information, treating it as data like any other is a prerequisite for deciding how it might best be used.

The second-level abstraction of the data in this study goes beyond the first-level abstraction to speculate about the possible meaning of the pattern described in the first level. The second level involves the formation of hypotheses about the interactions between development and disorder, and proposes interpretations which the subject did not make for himself. Thus, the attempt to form a second-level abstraction assumes that unconscious factors are significant and therefore proposes hypotheses about what they might be. However, alternative hypotheses can be proposed to interpret the significance of the development/disorder pattern.

As an example of an alternative interpretation, I will discuss the pattern of Leon's psychoses. In this report, I proposed that Leon's psychoses followed upon cumulative stresses and an intense, isolating work style. The second-level abstraction looked to the meaning of the stresses and the context of the work as contributors to psychosis. However, an alternative view is that Leon threw himself intensely into work as a response to a sense of growing internal disorganization and impending psychosis. Working obsessively might have been his method of attempting to remain organized. Leon said his state of "elevation" was both a means to try to work more efficiently, and an escape from stress. Perhaps Leon rationalized that the onset of the "elevated" state was his choice, when actually he entered it as a last-ditch attempt to avoid becoming psychotic.

Which view better accounts for the data, or are they both equally plausible? They are contradictory hypotheses, since I have argued in the report that work was a key factor in contributing to Leon's psychoses,

and here I am proposing that through work he tried to ward off psychosis. One way of resolving the question is to see what happens to this pattern over time. On the one hand, it certainly appeared that Leon chose to modify his work style and environment in order to avoid full-blown psychoses. On the other hand, perhaps he would have modified his work style and environment eventually as part of a developmental choice, and he would still start working intensely again if he were ever to sense impending psychosis. I can only say that following such a subject prospectively and attempting to predict the occurrence of symptoms based on what is known about his previous pattern is the only way to confirm or disconfirm such contradictory hypotheses.

4.The Problem and Possible Lesson of Gender Issues

It is distressing to realize that virtually all of the existing studies and theories of development have been based on the study of men's lives. Perhaps this is why so many of the attempts to convey human development sound incomplete. The gender problem points out what is limited in theories of development as a whole. Even when women are studied, the conclusions seem limited. For example, Robert Emde (21) reviewed J. Block's 1971 prospective study of mens' and womens' lives, Lives Through Time. The findings were summarized in the form of generalized descriptions of the nature of development for each gender group. The male characterization sounded interesting; the female characterization sounded dated and irrelevant. Perhaps we should simply realize that this characterization merely reflects female qualities considered appropriate for the 1960's when these data were collected.

But what does this say about the way general notions of development are formed? Are the male characterizations also dated? Or are there separate paths of development for men and women that could be described in a less historically restricted way, as Gilligan (31) suggests for the case of moral development? Or is there a more universal definition of what it means to develop?

This study focused on the developmental issues of two men. I discussed these men in detail as unique individuals, which I think is one way of avoiding gender-based generalizations. The developmental theories which I think are most useful for such a study are those which I call "dialectical," because for the most part these theories struggle with the concept of what it means to develop, rather than defining development with respect to gender categories which are necessarily restricted. I understand gender to be different from biological sex, in that gender is a historically specific, socially constructed concept, the parameters of which vary in different historical periods. We are always investigating from a particular historical and cultural stance; understanding and acknowledging that stance is one way to be less restricted by it.

D. Implications of This Study

My central hypothesis that it is possible to describe a longitudinal pattern of interactions between development and mental disorder has theoretical implications for further investigation into the course of mental disorders. This hypothesis may contribute to the understanding that disorders occur in people who are subject to many complex influences over time, both external and internal. It is exciting to realize that

mental disorder may have other than purely negative effects on development, and that disorders can potentiate development in new and unexpected directions. It is also heartening to think that the strength of normal development is such that it can continue despite the presence of disorder, or even be furthered by the necessity of having to cope with the disorder.

A second implication has to do with the significance of conducting a study as a means of forming hypotheses. Hypotheses were generated in this study by means of a long, slow process of careful consideration of complex data. Initial hypotheses emerged from consideration of the first subject, which were then clarified by consideration a second subject who was quite different in many ways. This comparison of two subjects is a means of refining the hypotheses and of systematically checking on their relevance to more than one subject. In this process, some key questions became apparent, but specific variables that would be easy to operationalize have not yet come to light. Although it may be possible to identify these in the future, it would have been hard to know even what questions to pursue using methods of quantification at the first phase of inquiry. Hence, thoughtful, in-depth consideration of complex data from people discussing their lives is clearly an important way to form significant questions for clinical research.

A third implication of this study is that hypotheses thus generated from and staying close to specific data from more than one subject may have clinical relevance. The central hypothesis generated in this study implies that the fulcrum of comparison between two dissimilar subjects is developmental issues. Hence, the search for developmental

characteristics in any patient's course could prove fruitful, even in patients who have widely differing disorders and life issues. For instance, looking not only at the occurrence of symptoms but also at the patient's developmental striving could lead to the formation of a model of the pattern of fluctuation of the patient's disorder. Understanding this pattern might help the patient decide what developmental goals he or she wants to pursue and how best to do this given the disorder.

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